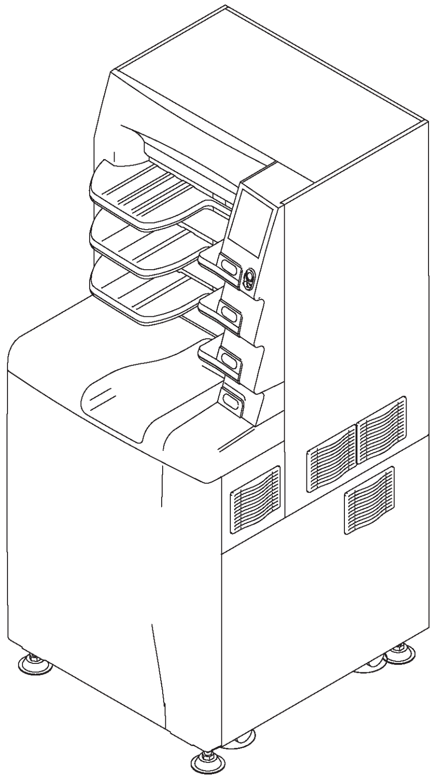
FUJIFILM

FUJI COMPUTED RADIOGRAPHY

XG5000/XG2000

CR-IR 362

Service Manual



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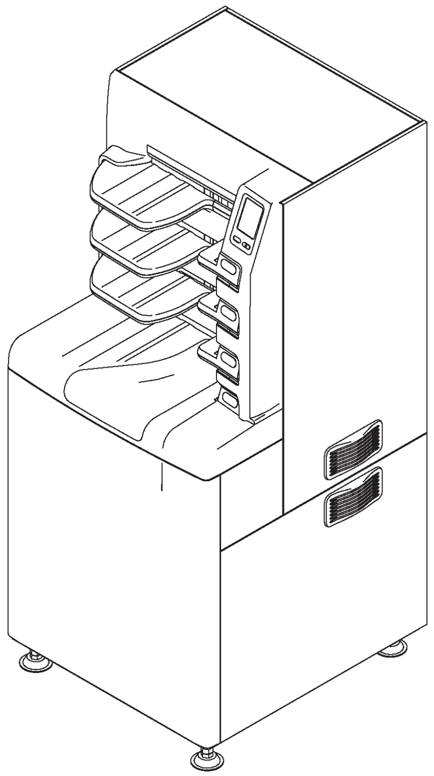

#50001 or Later

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The relationship between mR (milliroentgen), which is the unit of radiation, and μC/kg (micro-coulomb/kilogram), which is the SI derived unit of radiation, is as follows.
1 mR = 0.258μC/kg

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1. Handling of This Manual

1.1 About This Manual

■ Scope

This Service Manual is applicable to Fuji Computed Radiography CR-IR362. The machine is categorized as Class 1 according to IEC classification.

■ Notation of Unit Symbols

For notation of unit symbols, metric units set forth in the International Systems of Units (SI) are used, as a rule. However, metric units that are allowed in the Measurement Law, not in the SI, are used in some cases.

1.2 Precautions for Handling of This Manual

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1.3 About Notation in the Manual

■ Notation of cautions, warnings, etc.

The notation formats of "warning", "caution", "Instruction", "note", and "reference" are shown below.

⚠ ***WARNING***

Used when death or serious injury may occur if the instruction is not observed.

⚠ *CAUTION*

Used when minor or medium levels of physical injury may be incurred if the instruction is not observed.
Also used when the machine may suffer serious trouble (such as unrecoverable or difficult-to-recover trouble).

◆ ***INSTRUCTION*** ◆

Used when the machine may suffer damage, or any failure or malfunction may occur, if the instruction is not observed.

◆ ***NOTE*** ◆

Used to indicate the matters that need attention during steps of the procedure.

◇ *REFERENCE* ◇

Used to indicate terminology or supplemental explanations.

■ Indication of Refer To

The "☞" mark is used to indicate the chapter or section you should refer to.
Its format is as indicated below.

☞ **{MC:9.1_Erasure conveyor unit}**

■ Notation in the Manual

In this Service Manual, the CR-IR362 is sometimes denoted simply as the RU (Reader Unit), and the CR-IR346/348CL as the CL.

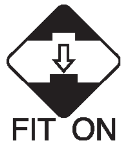
■ Notation of Symbols

- Check/Adjustment indicator: Indicates that it is necessary to check or adjust the installation location when the part or component removed is to be reinstalled.

This indicator is placed in the illustration that depicts the procedures for removing the parts and components.

When you see this indicator, refer to its relevant "■ Check/Adjustment Procedures."

- Half-punch indicator: Indicates that it is necessary to align the half-punches when installing the parts or components.



However, it is not indicated for the half-punches for improving ease of assembly or preventing erroneous assembly procedures.

1.4 Servicing Instruments and Tools That Require Inspection/Calibration

The machine should be installed and serviced by use of servicing instruments and tools that have been regularly inspected and calibrated as appropriate.

If the machine were serviced using servicing instruments and tools that have not been inspected and calibrated, proper performance of the machine could not be guaranteed.

Servicing instruments and tools that require inspection/calibration are as listed below.

The inspection/calibration should be planned and performed in accordance with the specifications and instruction manuals of the applicable servicing instruments and tools.

■ Instruments and Tools That Require Inspection/Calibration

Name	Inspection	Calibration
Dosimeter	-	○
Steel rule (150 mm)	○	-
Steel rule (300 mm)	○	-
Digital multimeter	○	○
Calipers	○ (✻)	-

✻: A block gauge for use in inspection requires calibration.

■ Servicing of the XG2000

- The servicing for the XG2000 is almost the same as that for the XG5000. Only the servicing operations specific to the XG2000 are described at the end of the respective service manuals.
- In using the MUTL, read “shelf 1/shelf 2” instead of “shelf 3/shelf 4” for servicing.

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CR-IR 362 Service Manual

Safety Precaution

Control Sheet

Issue date	Revision number	Reason	Pages affected
08.25.2003	01	New release (FM4098)	All pages
11.15.2004	04	Corrections (FM4425)	1
05.09.2005	05	Corrections (FM4610)	4–15
10.02.2006	06	Change of Corporate Name and Corporate Logo (FM4977)	5, 7, 13
02.19.2007	07	Change of document number, corrections (FM5097)	All pages
09.30.2008	08	Revision (FM5340)	4–19
09.30.2009	09E	Revision (FM5539)	6, 7, 9, 13

1. Safety Precautions

Warnings and cautions regarding the procedures should be observed to avoid possible physical hazards and serious accidents that may occur during installation and servicing.

Labels that describe relevant precautions are attached on the machine.

The instructions on such labels should also be observed during procedures.

1.1 General Precautions

■ Power Supply

Unless otherwise instructed in the Service Manual, be sure to turn OFF the power of the machine and unplug the power plug before servicing. With the power plug still plugged, you may experience electric shock, burn, or secondary damage due to short circuit even when the machine is powered OFF. It should be noted, however, that some servicing procedures, such as voltage measurement, cannot be performed under power-OFF condition. In such cases, use due care to avoid electric shock, burn, or secondary damage due to short circuit, as instructed in this manual.

■ Drive Mechanism

Be sure to turn OFF the power before servicing the gears, cams, belts, and other drive mechanism parts. Otherwise, your body or clothing may be entangled.

However, there may be cases where the procedures cannot be performed under power-OFF condition. In such cases, use due care to avoid entanglement of your hand, foot, hairs, and clothing with any rotating mechanism, as instructed in this manual.

■ Heavy Objects

Exercise due care regarding your working posture to avoid back pain during removal and installation of heavy objects.

■ Safety Devices

Safety devices (such as fuses, circuit breakers, interlock switches, panels, and covers) should always be enabled. Never attempt to make any alteration or modification that may impair their safety features.

■ Optical Parts

- When servicing the optical parts with the protective housings removed, be sure to turn OFF the power switch.
- Never remove the scanning optics unit covers.
- For dust removal procedures, observe the instructions described in the service manual.
- Some high-voltage parts, such as the photomultiplier, may not be sufficiently discharged even after power is turned OFF. When servicing such parts, exercise due care to avoid electric shock hazards (not to touch the connector and terminal carelessly).
- Before removing the protective housings, be sure to turn OFF the high-voltage switch (HV switch). If the machine is powered ON with any of the protective housings removed, the photomultiplier will be damaged.

■ Other Working Precautions

- When performing servicing procedures with the protective housings removed under the powered condition, turn OFF the high-voltage switch (HV switch). Carefully proceed with the procedures while checking the instructions described in the service manual, and, when the procedures are completed, put the removed protective housings back exactly where they were.
- Do not remove or install any part or component while the machine is powered, because of possible electric shock hazards.
- When performing checks or adjustments under the powered condition, exercise due care against electric shock or other hazards.
- Do not touch the parts (such as erasure lamps) that remain at high temperature because you may suffer burns.
- When servicing the scanning optics unit and printed circuit boards, be sure to wear an antistatic wristband to remove static electricity built on the human body. Static electricity may cause damage to the printed circuit boards.
- Secure the machine onto the floor in place by use of its adjustable feet or retainers.
- Keep clean the product labels, safety standards labels, product serial number indications, and so forth attached on the machine, and do not peel them or put another label over them.
- Before powering ON the machine after completion of the servicing procedures, make sure that all the parts, screws, connectors, and so forth that were removed have been reinstalled as appropriate, and that no tool is left in the machine.

■ Grounding

Safety provided by grounding is assured by properly establishing power cable and additional protective ground wire connections and securing the parts with retaining screws. To maintain safety, ensure that the parts and retaining screws removed for servicing purposes are restored to states existing upon installation. After the parts and retaining screws are restored to the above-mentioned states, follow the procedures set forth in this service manual to verify that the retaining screws are securely tightened to properly secure the parts.

1.2 Precautions Against Laser Radiation

As indicated in the Certification and Indication Label attached on the lower left-hand side cover of the machine, the machine complies with “Laser Products - Conformance with IEC 60825-1, Am. 2 and IEC 60601-2-22; Final Guidance for Industry and FDA (Laser Notice No. 50) and NE60825-1 (Amendment 2).” The image reader incorporates a laser with a maximum output of 50 mW (Class 3B, semiconductor laser wavelength of 660 nm, red visible light), but you will not be exposed to any hazard if you perform tasks as instructed in the service manual.

■ Precautions Against Laser Exposure

Observe the following precautions to avoid laser exposure.

● Procedures that require precautions against laser exposure

When performing the following procedures, observe the instructions exactly as described in this manual to avoid laser exposure. After the procedures are completed, put the removed protective housings and screws back exactly in their original position to prevent leakage of a laser beam out of the machine.

- Removal and reinstallation of the scanning optics unit.
- Replacement and cleaning of subscanning unit parts.

● Preventive maintenance for keeping the machine in compliance

In order to keep the machine in compliance, perform preventive maintenance programs described in "Preventive Maintenance Volume" at intervals specified.

● Things that should not be done to avoid laser exposure

Observe the following precautions to avoid laser exposure.

- Never attempt to perform procedures other than instructed in this manual because you may be exposed to laser beam radiation.
- Do not reflect a laser beam by placing a mirror or the like in the laser beam path.
- Do not alter the light path of a laser beam.
- Do not replace optical parts while the laser is energized.
- Do not attempt to make optical axis adjustment in the field. Although the semiconductor laser beam is red visible light, field adjustment of the optical axis cannot be done.

1.3 Precautions on Patient Environment

Before the machine is installed, the supervisor at the machine installation site (the hospital’s director) should check to see whether the machine is installed in the patient environment or not.

■ Additional Protective Grounding

If the CR-IR 362 is installed in the patient environment with the connected equipment in the non-medically used room, the additional protective grounding will be required.

Definitions of "patient environment", "medically-used room", and "non-medically used room" are given below.

● Patient Environment

Patient environment is the area for the patient to receive medical procedures (treatment, tests, diagnosis, monitoring). It is the space measuring 2.5 m in all four directions and 2.5 m in height from the area of the patient’s body.

It excludes the space traveled by the patient to reach the medically-used room.

● Medically-Used Room

Room equipped with protective grounding (medical use outlet or medical use grounding terminal) implemented by the medical grounding method. The protective grounding inside the medically-used room is equipotential, and the protective grounding of this medically-used room is equipotential to that in the other medically-used room.

Generally, a portion of the medically-used room is the patient environment.

● Non-Medically Used Room

Areas outside the medically-used room are considered the non-medically used room.

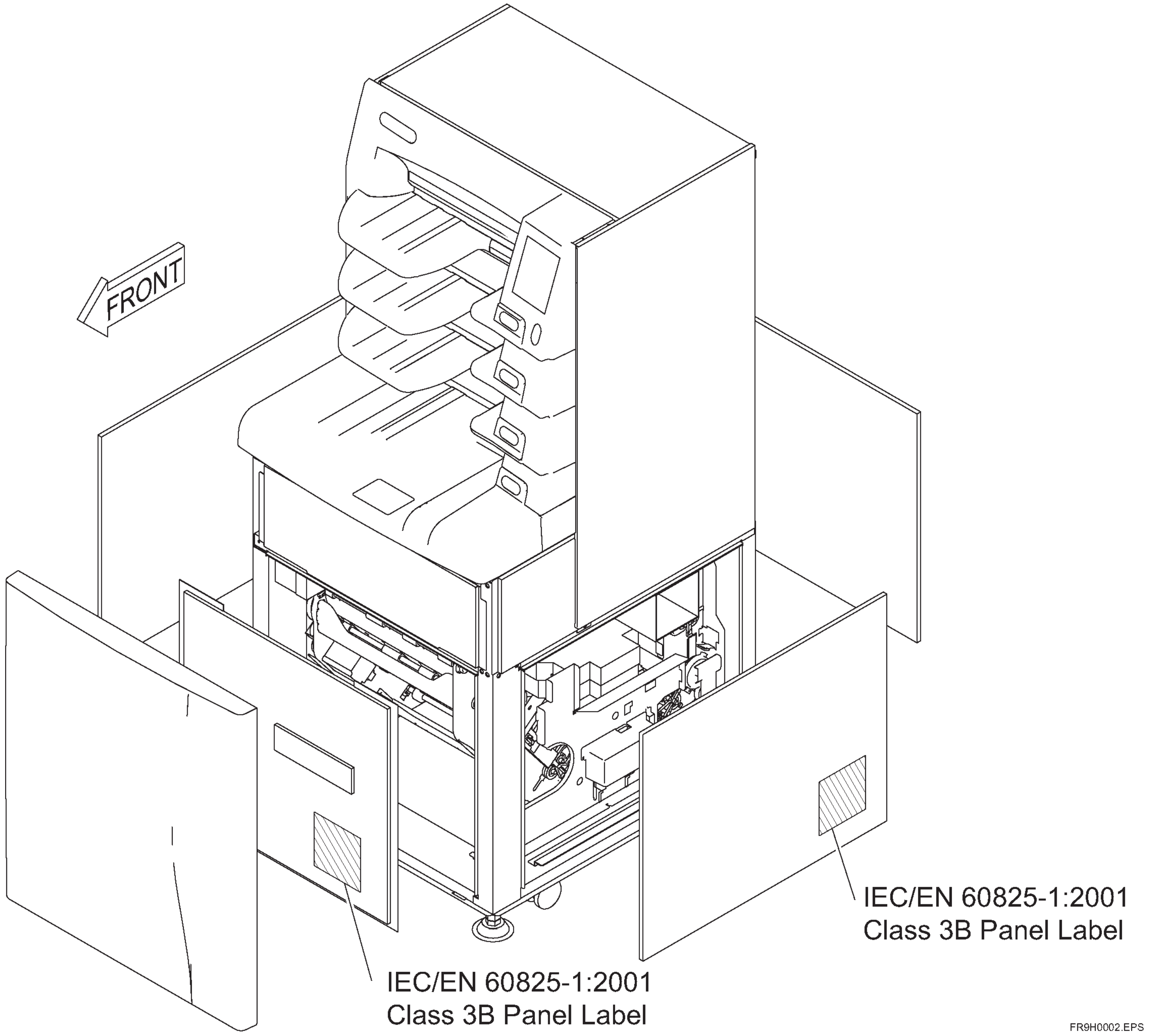
2. Labels

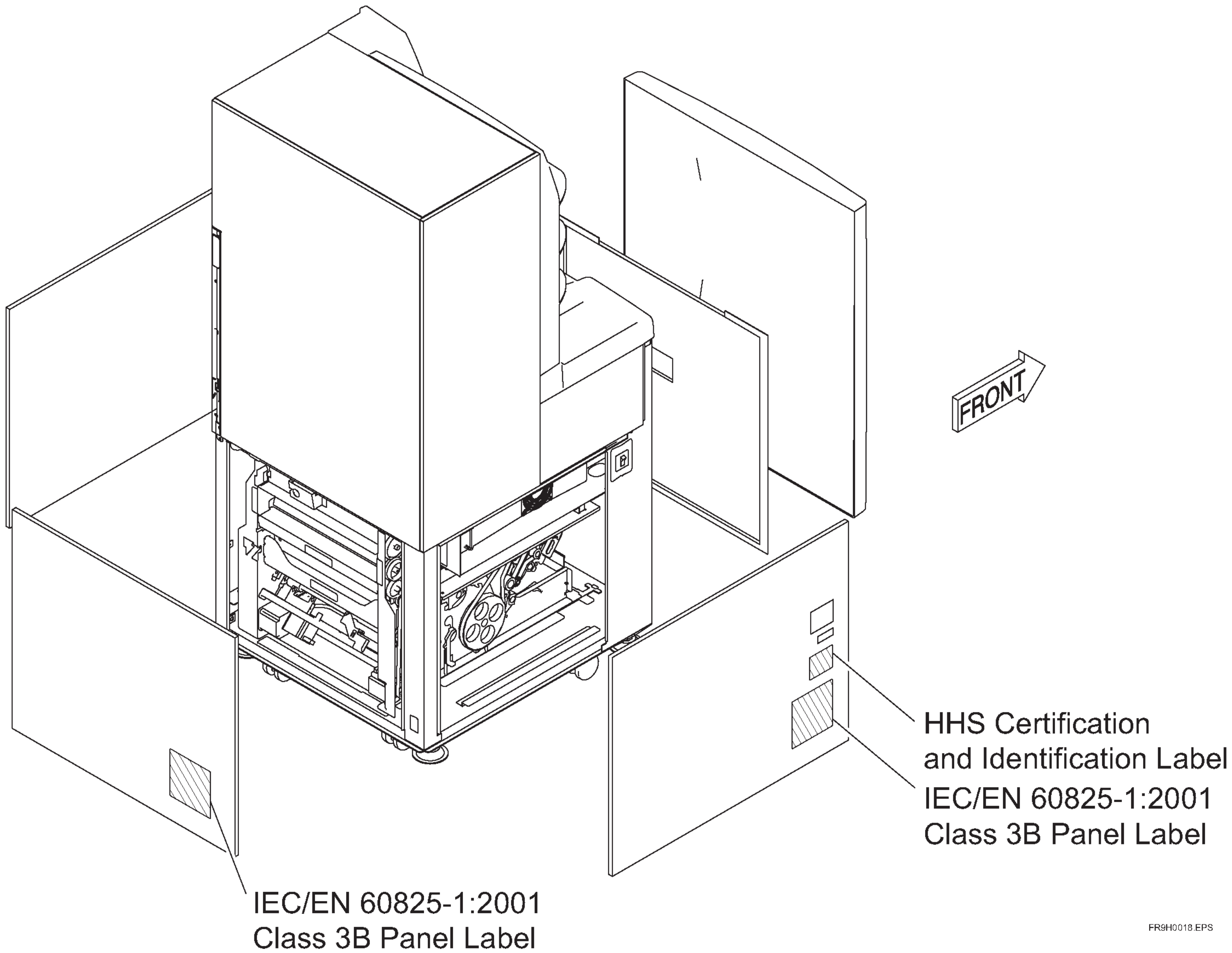
2.1 Laser Precaution Labels

2.1.1 Laser Precaution Label Attachment Locations

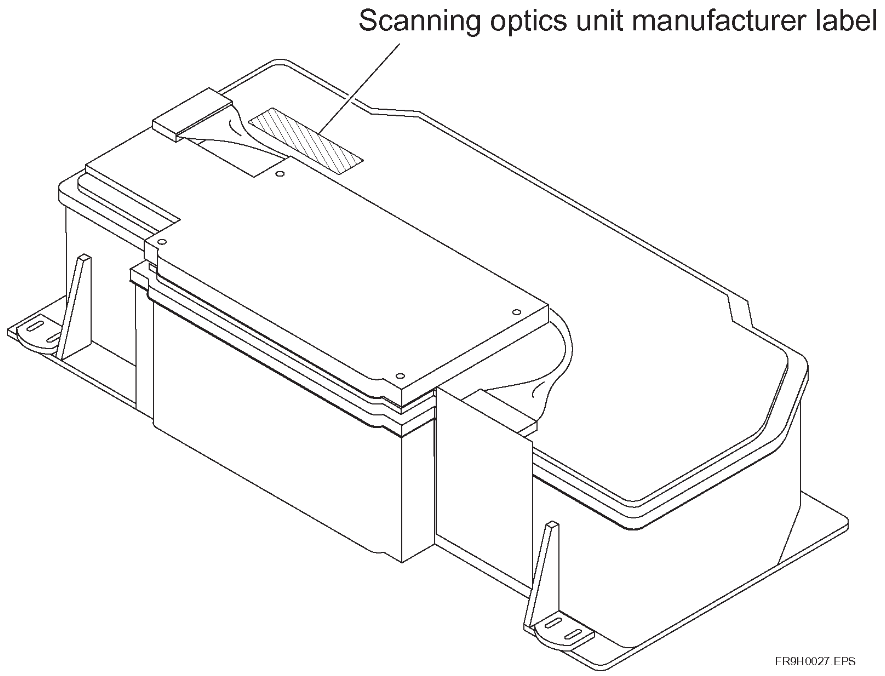
Below are illustrated the protective housings and attachment locations of laser precaution labels, as specified in "Laser Products - Conformance with IEC 60825-1, Am. 2 and IEC 60601-2-22; Final Guidance for Industry and FDA (Laser Notice No. 50) and NE60825-1 (Amendment 2)." issued by the FDA of the U.S.

- **Machine main body**


FRONT
IEC/EN 60825-1:2001
Class 3B Panel Label
IEC/EN 60825-1:2001
Class 3B Panel Label
FR9H0002.EPS


FRONT
HHS Certification
and Identification Label
IEC/EN 60825-1:2001
Class 3B Panel Label
IEC/EN 60825-1:2001
Class 3B Panel Label
FR9H0018.EPS

- **Scanning Optics Unit**

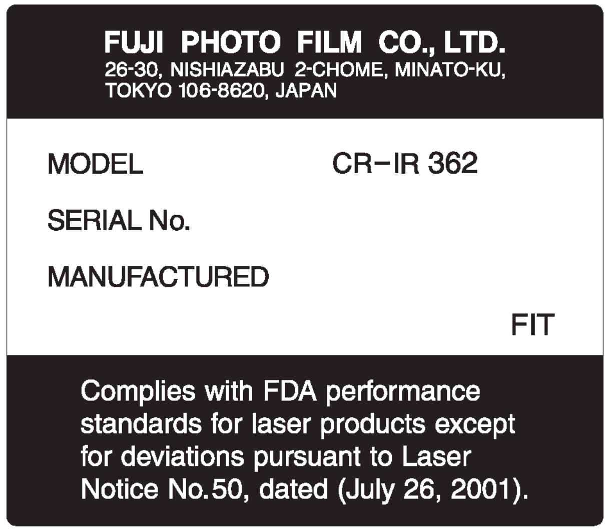

Scanning optics unit manufacturer label
FR9H0027.EPS

2.1.2 List of CR-IR 362 Laser Precaution Labels

◇ REFERENCE ◇

The laser caution label attached to the machine differs depending on its serial number. Shown below are the laser caution labels to be attached to the machines with the serial numbers of 21780 or earlier.

■ HHS Certification and Identification Label



FUJI PHOTO FILM CO., LTD.
26-30, NISHIAZABU 2-CHOME, MINATO-KU,
TOKYO 106-8620, JAPAN

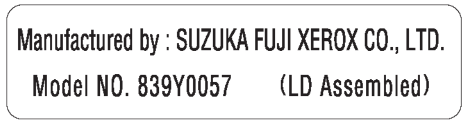
MODEL CR−IR 362
SERIAL No.
MANUFACTURED
FIT

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No.50, dated (July 26, 2001).

FR9H0005.EPS

■ Manufacturer Label

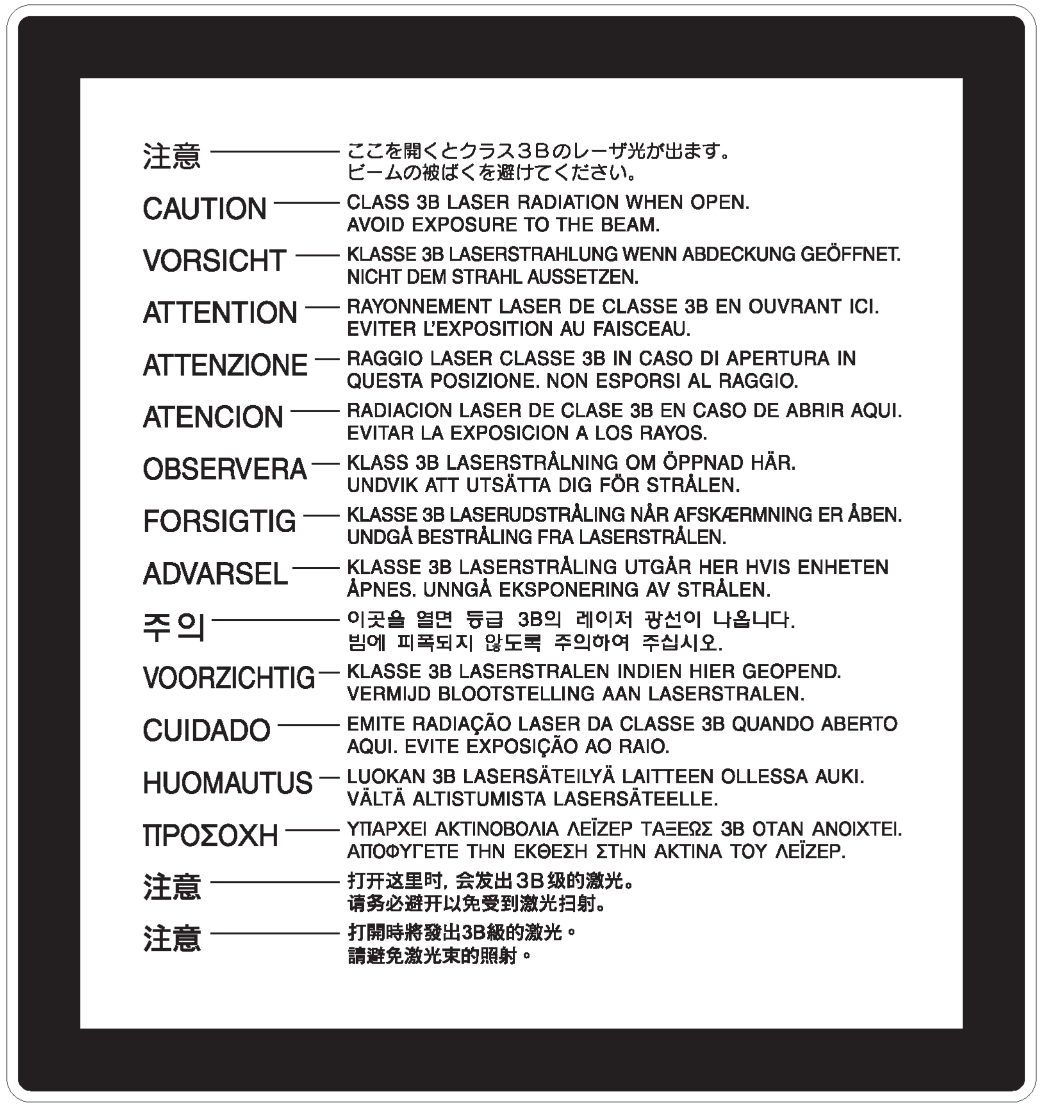
● Scanning optics unit manufacturer label



Manufactured by : SUZUKA FUJI XEROX CO., LTD.
Model NO. 839Y0057 （LD Assembled）

FR9H0029.EPS

■ IEC/EN60825-1:2001 Class 3B Panel Label



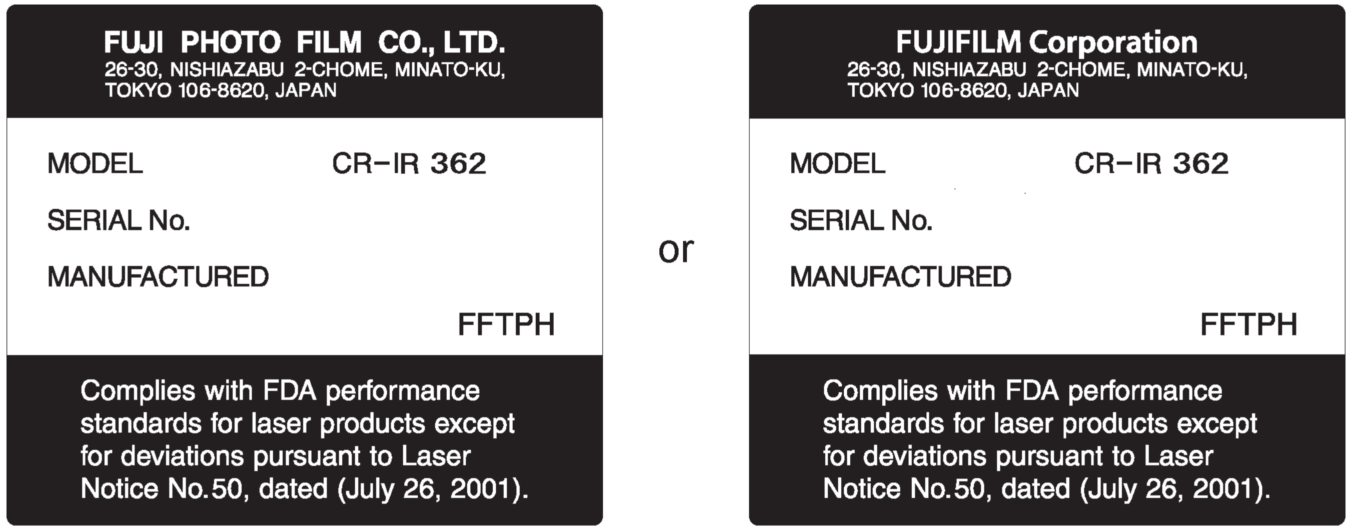
注意 — ここを開くとクラス３Ｂのレーザ光が出ます。
ビームの被ばくを避けてください。
CAUTION — CLASS 3B LASER RADIATION WHEN OPEN.
AVOID EXPOSURE TO THE BEAM.
VORSICHT — KLASSE 3B LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET.
NICHT DEM STRAHL AUSSETZEN.
ATTENTION — RAYONNEMENT LASER DE CLASSE 3B EN OUVRANT ICI.
EVITER L’EXPOSITION AU FAISCEAU.
ATTENZIONE — RAGGIO LASER CLASSE 3B IN CASO DI APERTURA IN
QUESTA POSIZIONE. NON ESPORSI AL RAGGIO.
ATENCION — RADIACION LASER DE CLASE 3B EN CASO DE ABRIR AQUI.
EVITAR LA EXPOSICION A LOS RAYOS.
OBSERVERA — KLASS 3B LASERSTRÅLNING OM ÖPPNAD HÄR.
UNDVIK ATT UTSÄTTA DIG FÖR STRÅLEN.
FORSIGTIG — KLASSE 3B LASERUDSTRÅLING NÅR AFSKÆRMNING ER ÅBEN.
UNDGÅ BESTRÅLING FRA LASERSTRÅLEN.
ADVARSEL — KLASSE 3B LASERSTRÅLING UTGÅR HER HVIS ENHETEN
ÅPNES. UNNGÅ EKSPONERING AV STRÅLEN.
주의 — 이곳을 열면 등급 3B의 레이저 광선이 나옵니다.
빔에 피폭되지 않도록 주의하여 주십시오.
VOORZICHTIG — KLASSE 3B LASERSTRALEN INDIEN HIER GEOPEND.
VERMIJD BLOOTSTELLING AAN LASERSTRALEN.
CUIDADO — EMITE RADIAÇÃO LASER DA CLASSE 3B QUANDO ABERTO
AQUI. EVITE EXPOSIÇÃO AO RAIO.
HUOMAUTUS — LUOKAN 3B LASERSÄTEILYÄ LAITTEEN OLLESSA AUKI.
VÄLTÄ ALTISTUMISTA LASERSÄTEELLE.
ΠΡΟΣΟΧΗ — ΥΠΑΡΧΕΙ ΑΚΤΙΝΟΒΟΛΙΑ ΛΕΪΖΕΡ ΤΑΞΕΩΣ 3Β ΟΤΑΝ ΑΝΟΙΧΤΕΙ.
ΑΠΟΦΥΓΕΤΕ ΤΗΝ ΕΚΘΕΣΗ ΣΤΗΝ ΑΚΤΙΝΑ ΤΟΥ ΛΕΪΖΕΡ.
注意 — 打开这里时, 会发出3B级的激光。
请务必避开以免受到激光扫射。
注意 — 打開時將發出3B級的激光。
請避免激光束的照射。

FR9H0009.EPS

◇ *REFERENCE* ◇

The laser caution label attached to the machine differs depending on its serial number. Shown below are the laser caution labels to be attached to the machines with the serial numbers of 21781 to 24649.

■ HHS Certification and Identification Label



FUJI PHOTO FILM CO., LTD.
26-30, NISHIAZABU 2-CHOME, MINATO-KU,
TOKYO 106-8620, JAPAN

MODEL CR−IR 362
SERIAL No.
MANUFACTURED
FFTPH

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No.50, dated (July 26, 2001).

or

FUJIFILM Corporation
26-30, NISHIAZABU 2-CHOME, MINATO-KU,
TOKYO 106-8620, JAPAN

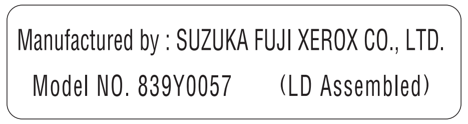
MODEL CR−IR 362
SERIAL No.
MANUFACTURED
FFTPH

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No.50, dated (July 26, 2001).

FR9H0043.EPS

■ Manufacturer Label

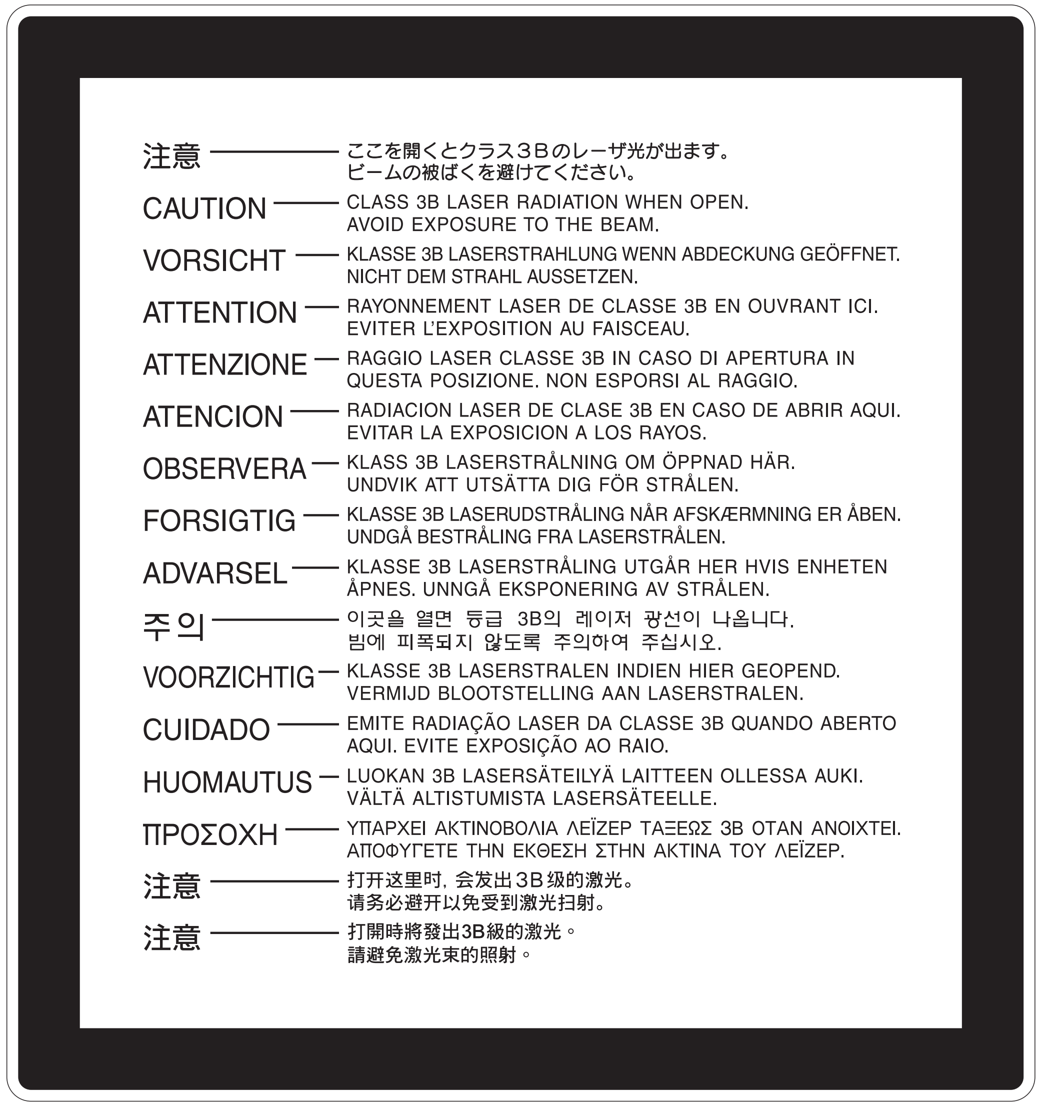
● Scanning optics unit manufacturer label



Manufactured by : SUZUKA FUJI XEROX CO., LTD.
Model NO. 839Y0057 （LD Assembled）

FR9H0029.EPS

■ IEC/EN60825-1: 2001 Class 3B Panel Label



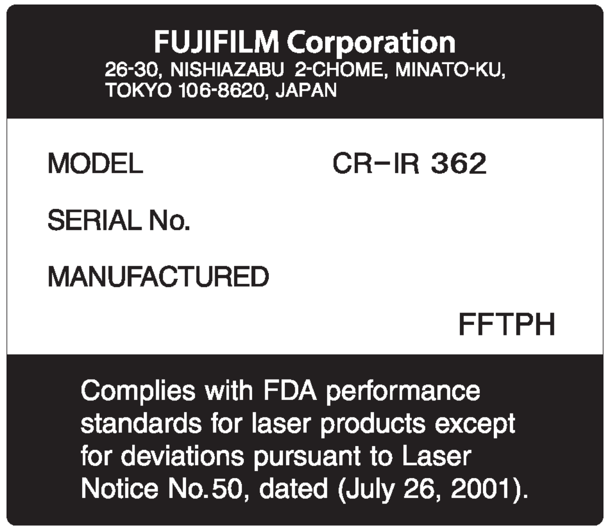
注意	ここを開くとクラス３Ｂのレーザ光が出ます。 ビームの被ばくを避けてください。
CAUTION	CLASS 3B LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO THE BEAM.
VORSICHT	KLASSE 3B LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
ATTENTION	RAYONNEMENT LASER DE CLASSE 3B EN OUVRANT ICI. EVITER L'EXPOSITION AU FAISCEAU.
ATTENZIONE	RAGGIO LASER CLASSE 3B IN CASO DI APERTURA IN QUESTA POSIZIONE. NON ESPORSI AL RAGGIO.
ATENCION	RADIACION LASER DE CLASE 3B EN CASO DE ABRIR AQUI. EVITAR LA EXPOSICION A LOS RAYOS.
OBSERVERA	KLASS 3B LASERSTRÅLNING OM ÖPPNAD HÄR. UNDVIK ATT UTSÄTTA DIG FÖR STRÅLEN.
FORSIGTIG	KLASSE 3B LASERUDSTRÅLING NÅR AFSKÆRMNING ER ÅBEN. UNDGÅ BESTRÅLING FRA LASERSTRÅLEN.
ADVARSEL	KLASSE 3B LASERSTRÅLING UTGÅR HER HVIS ENHETEN ÅPNES. UNNGÅ EKSPONERING AV STRÅLEN.
주의	이곳을 열면 등급 3B의 레이저 광선이 나옵니다. 빔에 피폭되지 않도록 주의하여 주십시오.
VOORZICHTIG	KLASSE 3B LASERSTRALEN INDIEN HIER GEOPEND. VERMIJD BLOOTSTELLING AAN LASERSTRALEN.
CUIDADO	EMITE RADIAÇÃO LASER DA CLASSE 3B QUANDO ABERTO AQUI. EVITE EXPOSIÇÃO AO RAIO.
HUOMAUTUS	LUOKAN 3B LASERSÄTEILYÄ LAITTEEN OLLESSA AUKI. VÄLTÄ ALTISTUMISTA LASERSÄTEELLE.
ΠΡΟΣΟΧΗ	ΥΠΑΡΧΕΙ ΑΚΤΙΝΟΒΟΛΙΑ ΛΕΪΖΕΡ ΤΑΞΕΩΣ 3B ΟΤΑΝ ΑΝΟΙΧΤΕΙ. ΑΠΟΦΥΓΕΤΕ ΤΗΝ ΕΚΘΕΣΗ ΣΤΗΝ ΑΚΤΙΝΑ ΤΟΥ ΛΕΪΖΕΡ.
注意	打开这里时，会发出３B级的激光。 请务必避开以免受到激光扫射。
注意	打開時將發出3B級的激光。 請避免激光束的照射。

FR9H0009.EPS

◇ *REFERENCE* ◇

The laser caution label attached to the machine differs depending on its serial number. Shown below are the laser caution labels to be attached to the machines with the serial numbers of 24650 or later and 50001 or later.

■ HHS Certification and Identification Label



FUJIFILM Corporation
26-30, NISHIAZABU 2-CHOME, MINATO-KU,
TOKYO 106-8620, JAPAN

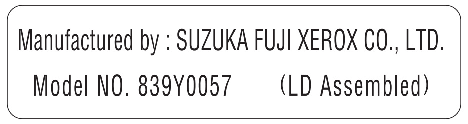
MODEL CR−IR 362
SERIAL No.
MANUFACTURED
FFTPH

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No.50, dated (July 26, 2001).

FR9H0050.EPS

■ Manufacturer Label

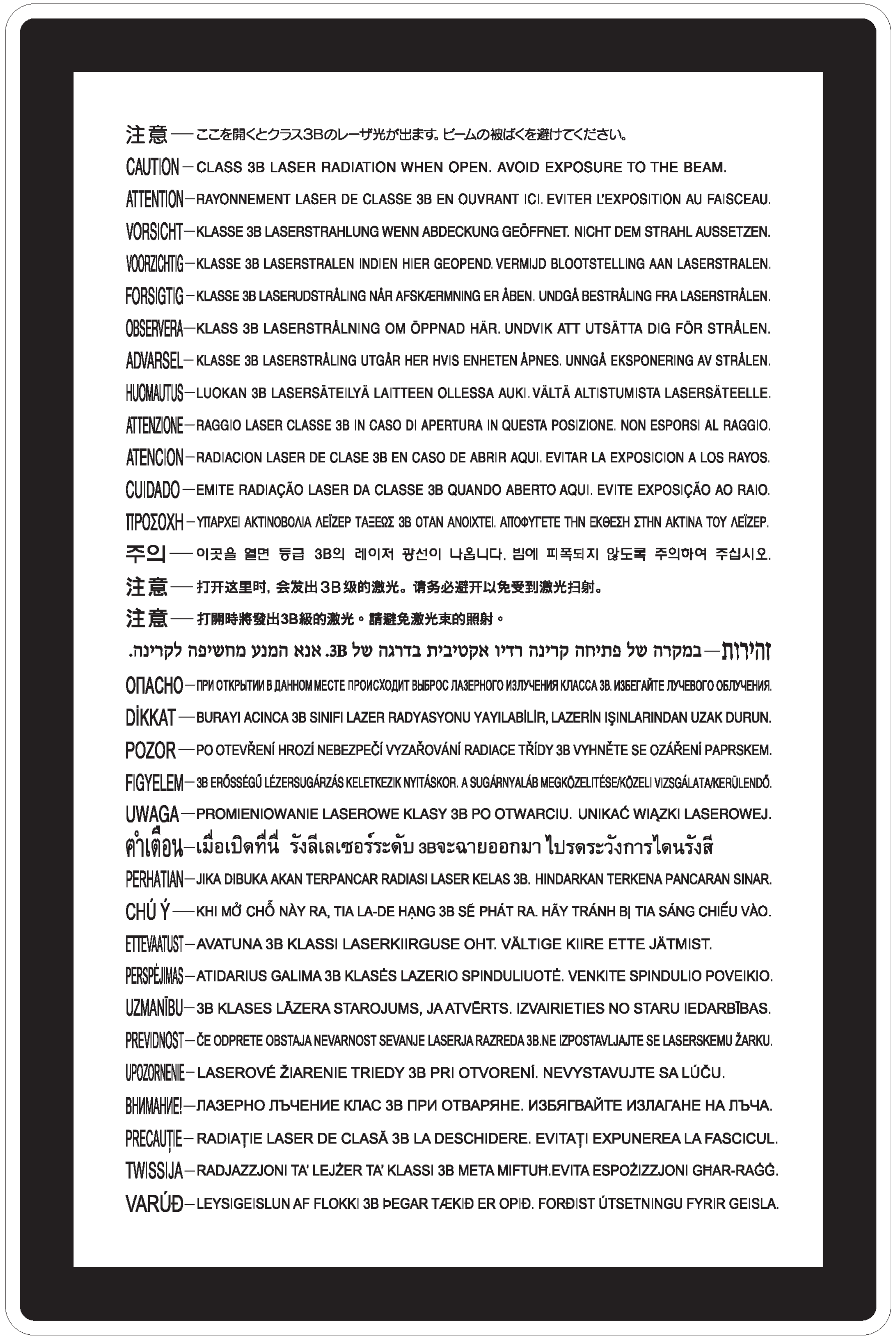
● Scanning optics unit manufacturer label



Manufactured by : SUZUKA FUJI XEROX CO., LTD.
Model NO. 839Y0057 （LD Assembled）

FR9H0029.EPS

■ IEC/EN60825-1: 2001 Class 3B Panel Label



注意 — ここを開くとクラス3Bのレーザ光が出ます。ビームの被ばくを避けてください。
CAUTION — CLASS 3B LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO THE BEAM.
ATTENTION — RAYONNEMENT LASER DE CLASSE 3B EN OUVRANT ICI. EVITER L'EXPOSITION AU FAISCEAU.
VORSICHT — KLASSE 3B LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
VOORZICHTIG — KLASSE 3B LASERSTRALEN INDIEN HIER GEOPEND. VERMIJD BLOOTSTELLING AAN LASERSTRALEN.
FORSIGTIG — KLASSE 3B LASERUDSTRÅLING NÅR AFSKÆRMNING ER ÅBEN. UNDGÅ BESTRÅLING FRA LASERSTRÅLEN.
OBSERVERA — KLASS 3B LASERSTRÅLNING OM ÖPPNAD HÄR. UNDVIK ATT UTSÄTTA DIG FÖR STRÅLEN.
ADVARSEL — KLASSE 3B LASERSTRÅLING UTGÅR HER HVIS ENHETEN ÅPNES. UNNGÅ EKSPONERING AV STRÅLEN.
HUOMAUTUS — LUOKAN 3B LASERSÄTEILYÄ LAITTEEN OLLESSA AUKI. VÄLTÄ ALTISTUMISTA LASERSÄTEELLE.
ATTENZIONE — RAGGIO LASER CLASSE 3B IN CASO DI APERTURA IN QUESTA POSIZIONE. NON ESPORSI AL RAGGIO.
ATENCION — RADIACION LASER DE CLASE 3B EN CASO DE ABRIR AQUI. EVITAR LA EXPOSICION A LOS RAYOS.
CUIDADO — EMITE RADIAÇÃO LASER DA CLASSE 3B QUANDO ABERTO AQUI. EVITE EXPOSIÇÃO AO RAIO.
ΠΡΟΣΟΧΗ — ΥΠΑΡΧΕΙ ΑΚΤΙΝΟΒΟΛΙΑ ΛΕΪΖΕΡ ΤΑΞΕΩΣ 3B ΟΤΑΝ ΑΝΟΙΧΤΕΙ. ΑΠΟΦΥΓΕΤΕ ΤΗΝ ΕΚΘΕΣΗ ΣΤΗΝ ΑΚΤΙΝΑ ΤΟΥ ΛΕΪΖΕΡ.
주의 — 이곳을 열면 등급 3B의 레이저 광선이 나옵니다. 빔에 피폭되지 않도록 주의하여 주십시오.
注意 — 打开这里时，会发出3B级的激光。请务必避开以免受到激光扫射。
注意 — 打開時將發出3B級的激光。請避免激光束的照射。
זהירות—במקרה של פתיחה קרינה רדיו אקטיבית בדרגה של 3B. אנא המנע מחשיפה לקרינה.
ОПАСНО — ПРИ ОТКРЫТИИ В ДАННОМ МЕСТЕ ПРОИСХОДИТ ВЫБРОС ЛАЗЕРНОГО ИЗЛУЧЕНИЯ КЛАССА 3В. ИЗБЕГАЙТЕ ЛУЧЕВОГО ОБЛУЧЕНИЯ.
DİKKAT — BURAYI ACINCA 3B SINIFI LAZER RADYASYONU YAYILABİLİR, LAZERİN IŞINLARINDAN UZAK DURUN.
POZOR — PO OTEVŘENÍ HROZÍ NEBEZPEČÍ VYZAŘOVÁNÍ RADIACE TŘÍDY 3B VYHNĚTE SE OZÁŘENÍ PAPRSKEM.
FIGYELEM — 3B ERŐSSÉGŰ LÉZERSUGÁRZÁS KELETKEZIK NYITÁSKOR. A SUGÁRNYALÁB MEGKÖZELITÉSE/KÖZELI VIZSGÁLATA/KERÜLENDŐ.
UWAGA — PROMIENIOWANIE LASEROWE KLASY 3B PO OTWARCIU. UNIKAĆ WIĄZKI LASEROWEJ.
คำเตือน—เมื่อเปิดที่นี่ รังสีเลเซอร์ระดับ 3Bจะฉายออกมา ไปรดระวังการไดนรังสี
PERHATIAN — JIKA DIBUKA AKAN TERPANCAR RADIASI LASER KELAS 3B. HINDARKAN TERKENA PANCARAN SINAR.
CHÚ Ý — KHI MỞ CHỖ NÀY RA, TIA LA-DE HẠNG 3B SẼ PHÁT RA. HÃY TRÁNH BỊ TIA SÁNG CHIẾU VÀO.
ETTEVAATUST — AVATUNA 3B KLASSI LASERKIIRGUSE OHT. VÄLTIGE KIIRE ETTE JÄTMIST.
PERSPĖJIMAS — ATIDARIUS GALIMA 3B KLASĖS LAZERIO SPINDULIUOTĖ. VENKITE SPINDULIO POVEIKIO.
UZMANĪBU — 3B KLASES LĀZERA STAROJUMS, JA ATVĒRTS. IZVAIRIETIES NO STARU IEDARBĪBAS.
PREVIDNOST — ČE ODPRETE OBSTAJA NEVARNOST SEVANJE LASERJA RAZREDA 3B.NE IZPOSTAVLJAJTE SE LASERSKEMU ŽARKU.
UPOZORNENIE — LASEROVÉ ŽIARENIE TRIEDY 3B PRI OTVORENÍ. NEVYSTAVUJTE SA LÚČU.
ВНИМАНИЕ! — ЛАЗЕРНО ЛЪЧЕНИЕ КЛАС 3В ПРИ ОТВАРЯНЕ. ИЗБЯГВАЙТЕ ИЗЛАГАНЕ НА ЛЪЧА.
PRECAUȚIE — RADIAȚIE LASER DE CLASĂ 3B LA DESCHIDERE. EVITAȚI EXPUNEREA LA FASCICUL.
TWISSIJA — RADJAZZJONI TA' LEJŻER TA' KLASSI 3B META MIFTUĦ.EVITA ESPOŻIZZJONI GĦAR-RAĠĠ.
VARÚÐ — LEYSIGEISLUN AF FLOKKI 3B ÞEGAR TÆKIÐ ER OPIÐ. FORÐIST ÚTSETNINGU FYRIR GEISLA.

FR9H0018.EPS

2.2 Other Labels

2.2.1 Attachment Locations for Ratings Indication Label and Other Labels

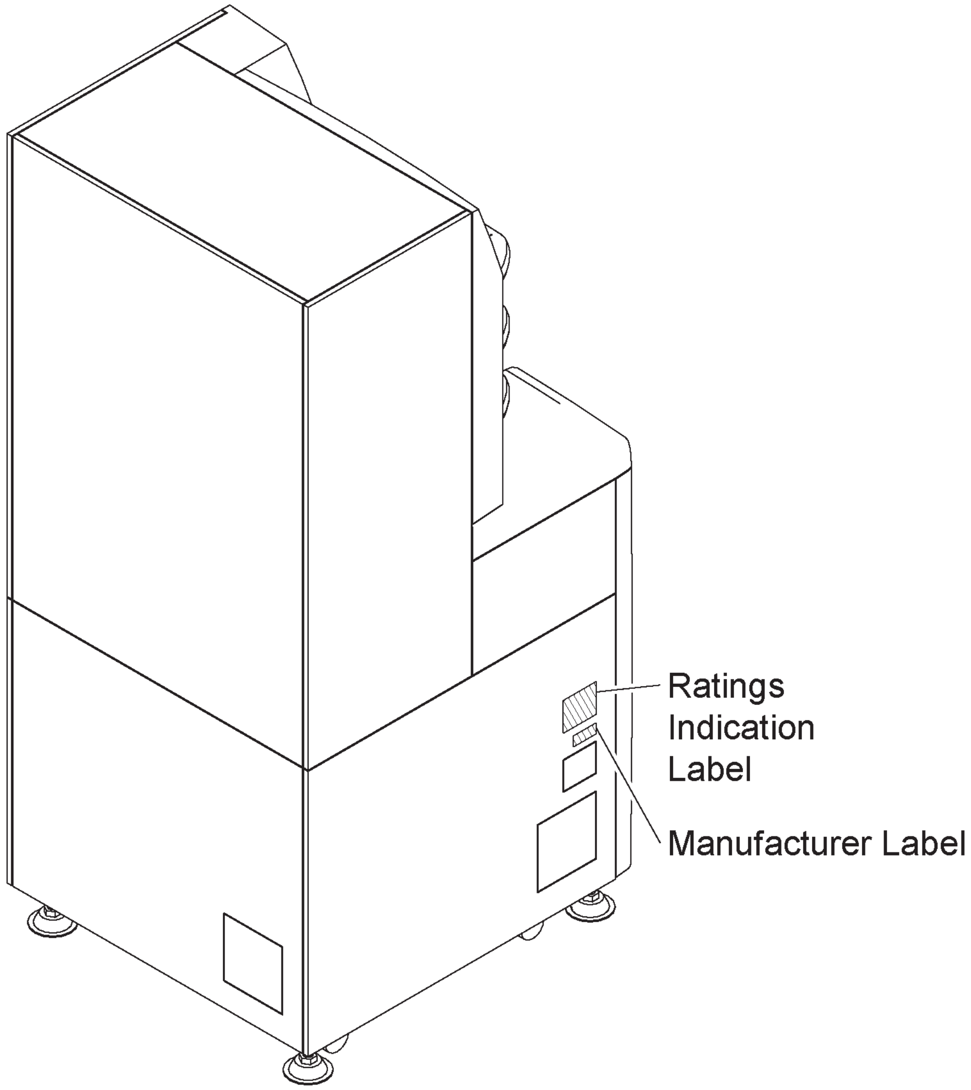
◇ *REFERENCE* ◇

- *The type of label is different depending on destinations and machine serial numbers.*
- *There are some equipment on which manufacturer labels are not attached, depending on the serial numbers.*

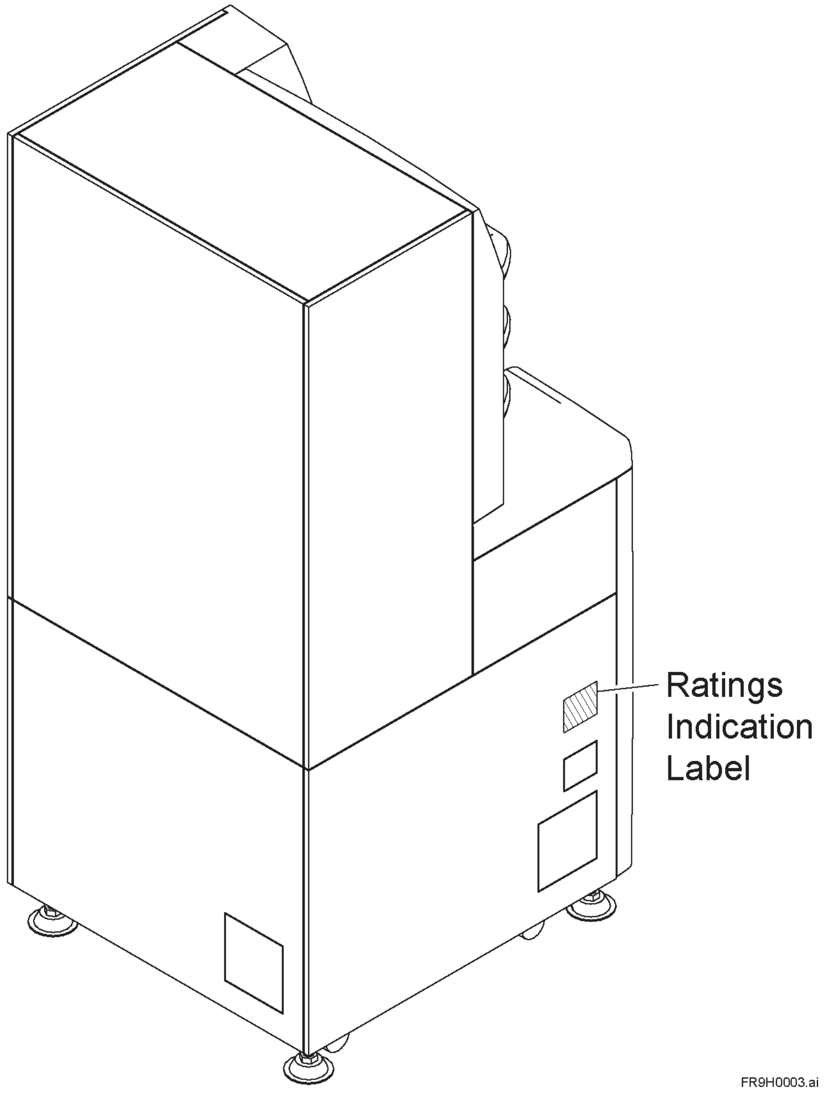
■ Attachment position of rating indication label for CR-IR 362

Equipment information: A manufacturer label is not attached on equipment whose serial numbers are 21781 or those later than 21781; or 50001 or those later than 50001.

● 21780 or those earlier than 21780

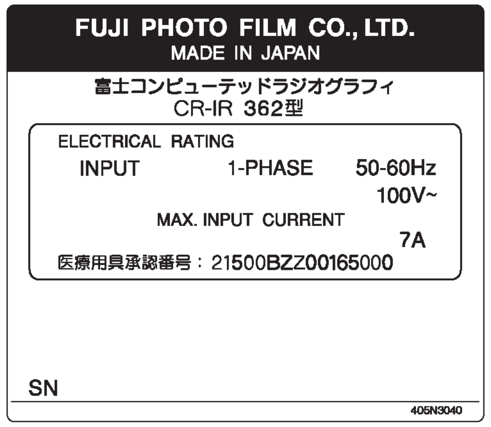

Ratings
Indication
Label
Manufacturer Label

● 21781 or those later than 21781; or 50001 or those later than 50001


Ratings
Indication
Label
FR9H0003.ai

■ Ratings Indication Labels of CR-IR 362 (machines with serial numbers 21780 or those earlier than 21780)

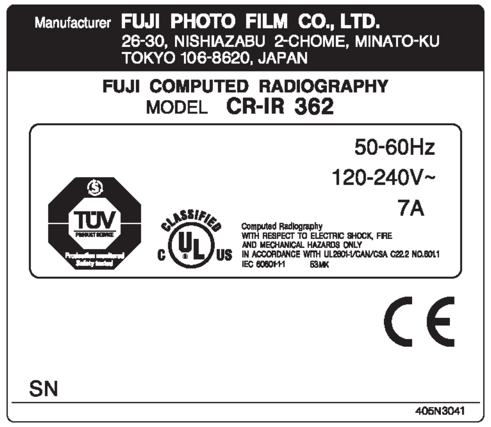
● For use in Japan



FUJI PHOTO FILM CO., LTD.
MADE IN JAPAN
富士コンピューテッドラジオグラフィ
CR-IR 362型
ELECTRICAL RATING
INPUT 1-PHASE 50-60Hz
100V~
MAX. INPUT CURRENT
7A
医療用具承認番号：21500BZZ00165000
SN
405N3040

FR9H0011.EPS

● For use outside Japan



Manufacturer **FUJI PHOTO FILM CO., LTD.**
26-30, NISHIAZABU 2-CHOME, MINATO-KU
TOKYO 106-8620, JAPAN
FUJI COMPUTED RADIOGRAPHY
MODEL **CR-IR 362**
50-60Hz
120-240V~
7A
Computed Radiography
WITH RESPECT TO ELECTRIC SHOCK, FIRE
AND MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH UL2601-1/CAN/CSA C22.2 NO.601.1
IEC 60601-1-1 53MK
SN
405N3041

FR9H0010.EPS

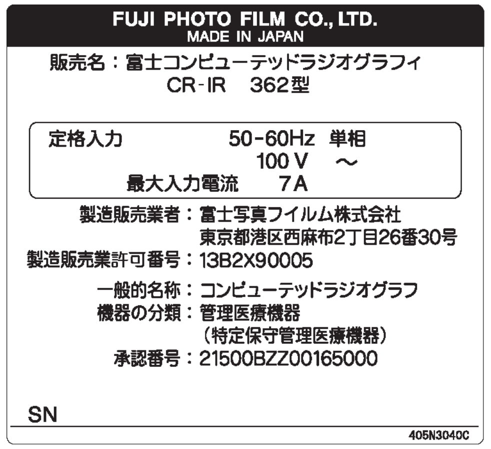
■ Manufacturer Label of CR-IR 362 (machines with serial numbers 21780 or those earlier than 21780)

製造元　（株）エフ・アイ・ティ
住　所　岩手県花巻市北湯口
第2地割1番地 3

FR9H0014.EPS

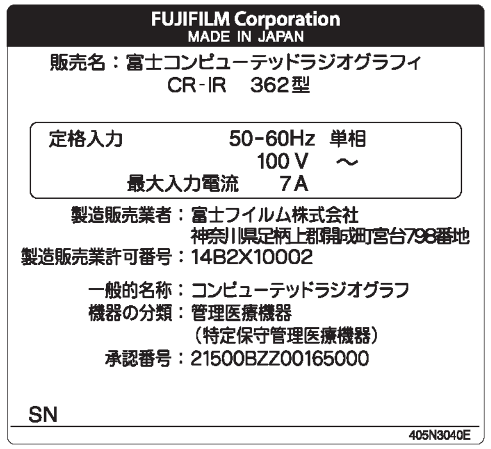
■ Ratings Indication Labels of CR-IR 362 (machines with serial numbers 21781 to 24167)

● For use in Japan



FUJI PHOTO FILM CO., LTD.
MADE IN JAPAN
販売名：富士コンピューテッドラジオグラフィ
CR-IR 362型
定格入力 50-60Hz 単相
100 V ～
最大入力電流 7A
製造販売業者：富士写真フイルム株式会社
東京都港区西麻布2丁目26番30号
製造販売業許可番号：13B2X90005
一般的名称：コンピューテッドラジオグラフ
機器の分類：管理医療機器
（特定保守管理医療機器）
承認番号：21500BZZ00165000
SN
405N3040C

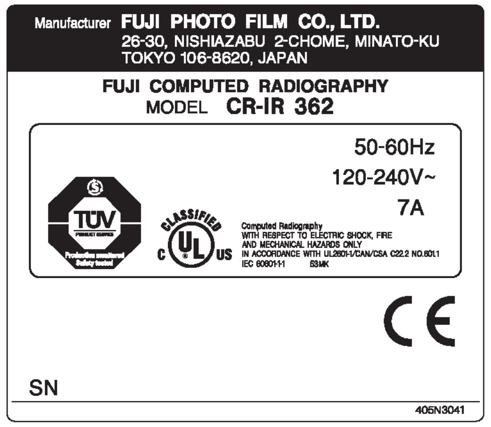
or



FUJIFILM Corporation
MADE IN JAPAN
販売名：富士コンピューテッドラジオグラフィ
CR-IR 362型
定格入力 50-60Hz 単相
100 V ～
最大入力電流 7A
製造販売業者：富士フイルム株式会社
神奈川県足柄上郡開成町宮台798番地
製造販売業許可番号：14B2X10002
一般的名称：コンピューテッドラジオグラフ
機器の分類：管理医療機器
（特定保守管理医療機器）
承認番号：21500BZZ00165000
SN
405N3040E

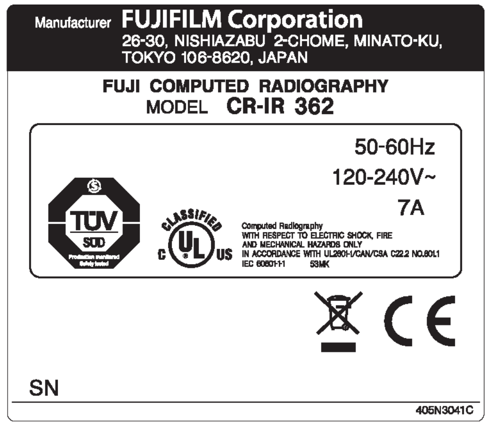
FR9H0045.EPS

● For use outside Japan



Manufacturer **FUJI PHOTO FILM CO., LTD.**
26-30, NISHIAZABU 2-CHOME, MINATO-KU
TOKYO 106-8620, JAPAN
FUJI COMPUTED RADIOGRAPHY
MODEL **CR-IR 362**
50-60Hz
120-240V~
7A
Computed Radiography
WITH RESPECT TO ELECTRIC SHOCK, FIRE
AND MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH UL2601-1/CAN/CSA C22.2 NO.601.1
IEC 60601-1-1 53MK
SN
405N3041

or



Manufacturer **FUJIFILM Corporation**
26-30, NISHIAZABU 2-CHOME, MINATO-KU,
TOKYO 106-8620, JAPAN
FUJI COMPUTED RADIOGRAPHY
MODEL **CR-IR 362**
50-60Hz
120-240V~
7A
Computed Radiography
WITH RESPECT TO ELECTRIC SHOCK, FIRE
AND MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH UL2601-1/CAN/CSA C22.2 NO.601.1
IEC 60601-1-1 53MK
SN
405N3041C

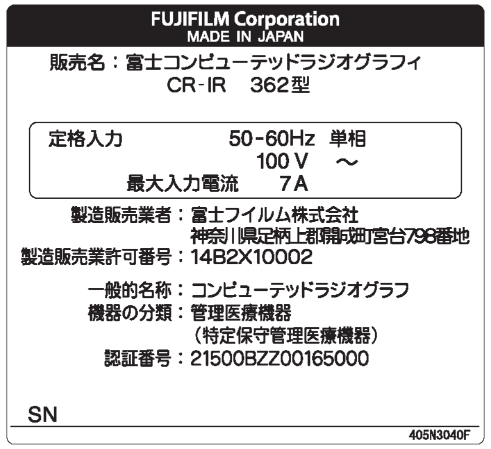
FR9H0048.EPS

◇ REFERENCE ◇

In case of CR-IR 362, a manufacturer label is not attached on equipment whose serial numbers are 21781 to 24167.

■ Ratings Indication Labels of CR-IR 362 (Machines with serial numbers 24168 or those later than 24168)

● For use in Japan



FUJIFILM Corporation
MADE IN JAPAN

販売名：富士コンピューテッドラジオグラフィ
CR-IR　362型

定格入力　50-60Hz　単相
100 V　～
最大入力電流　7A

製造販売業者：富士フイルム株式会社
神奈川県足柄上郡開成町宮台798番地
製造販売業許可番号：14B2X10002

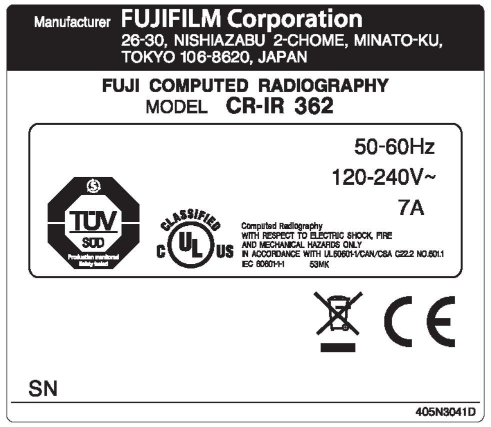
一般的名称：コンピューテッドラジオグラフ
機器の分類：管理医療機器
（特定保守管理医療機器）
認証番号：21500BZZ00165000

SN

405N3040F

FR9H0051.EPS

● For use outside Japan



Manufacturer **FUJIFILM Corporation**
26-30, NISHIAZABU 2-CHOME, MINATO-KU,
TOKYO 106-8620, JAPAN

FUJI COMPUTED RADIOGRAPHY
MODEL **CR-IR 362**

50-60Hz
120-240V~
7A

Computed Radiography
WITH RESPECT TO ELECTRIC SHOCK, FIRE
AND MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH UL60601-1/CAN/CSA C22.2 NO.601.1
IEC 60601-1-1　53MK

SN

405N3041D

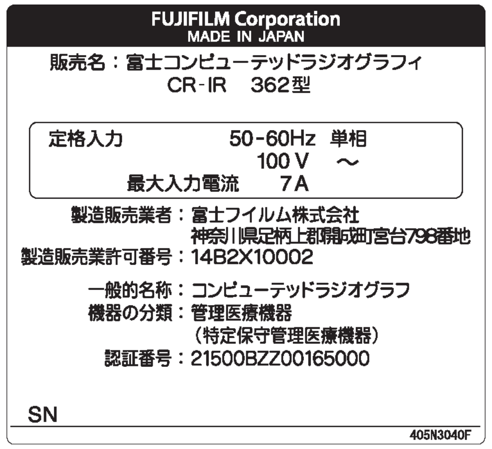
FR9H0055.AI

◇ *REFERENCE* ◇

In case of CR-IR 362, a manufacturer label is not attached on equipment whose serial numbers are 24168 or those later than 24168.

■ Ratings Indication Labels of CR-IR 362 (Machines with serial numbers 50001 or those later than 50001)

● For use in Japan



FUJIFILM Corporation
MADE IN JAPAN

販売名：富士コンピューテッドラジオグラフィ
CR-IR　362型

定格入力　50-60Hz　単相
100 V　～
最大入力電流　7A

製造販売業者：富士フイルム株式会社
神奈川県足柄上郡開成町宮台798番地
製造販売業許可番号：14B2X10002

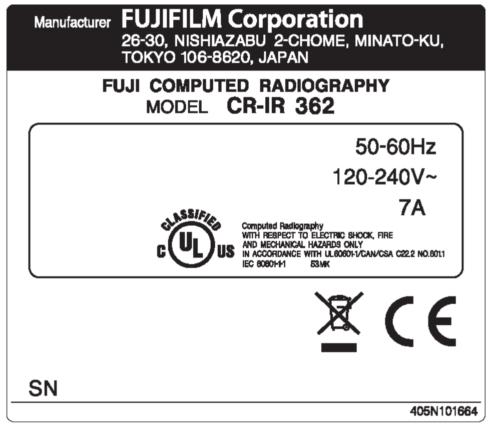
一般的名称：コンピューテッドラジオグラフ
機器の分類：管理医療機器
（特定保守管理医療機器）
認証番号：21500BZZ00165000

SN

405N3040F

FR9H0051.EPS

● For use outside Japan



Manufacturer **FUJIFILM Corporation**
26-30, NISHIAZABU 2-CHOME, MINATO-KU,
TOKYO 106-8620, JAPAN

FUJI COMPUTED RADIOGRAPHY
MODEL **CR-IR 362**

50-60Hz
120-240V~
7A

Computed Radiography
WITH RESPECT TO ELECTRIC SHOCK, FIRE
AND MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH UL60601-1/CAN/CSA C22.2 NO.601.1
IEC 60601-1-1　53MK

SN

405N101664

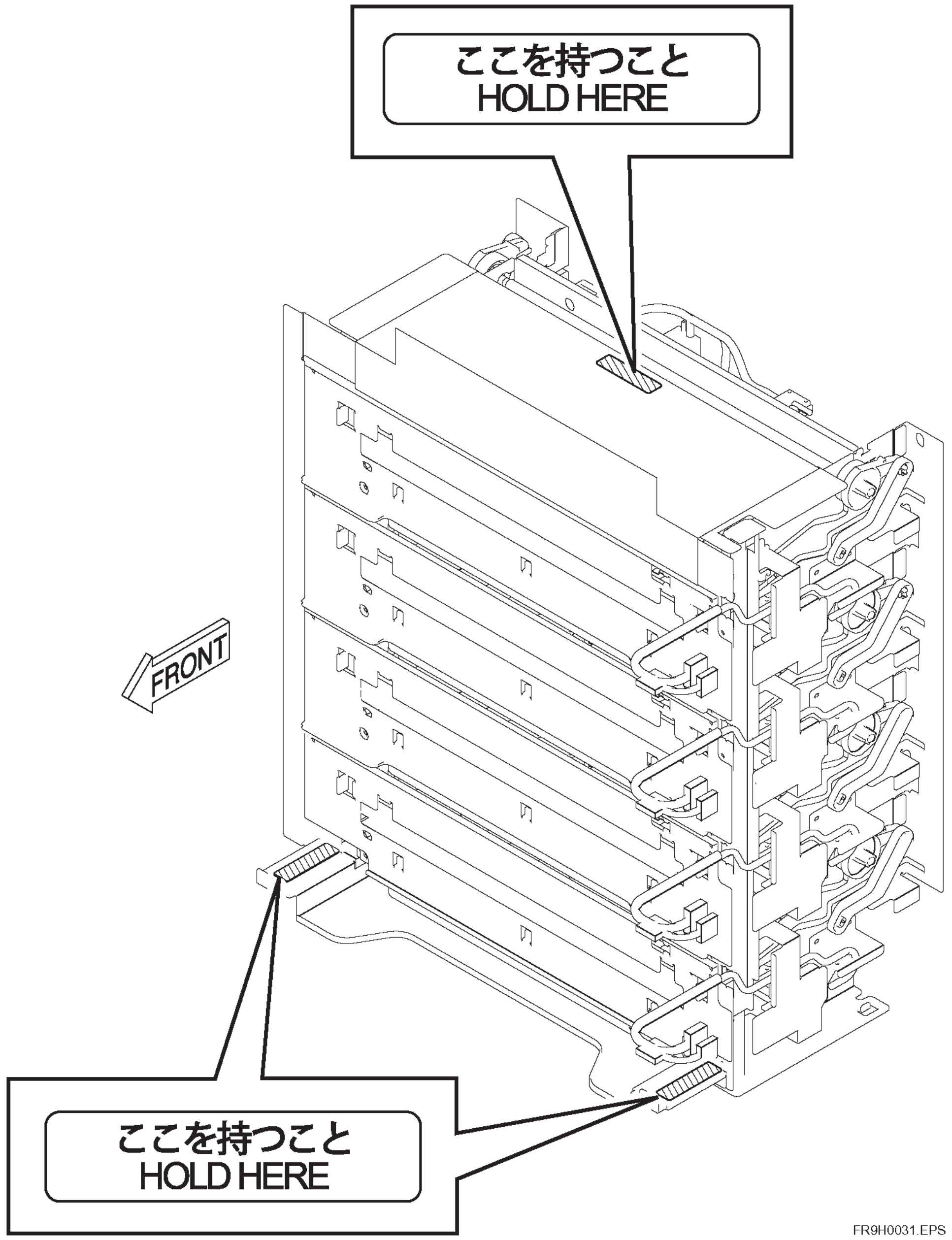
FR9H0054.ai

◇ *REFERENCE* ◇

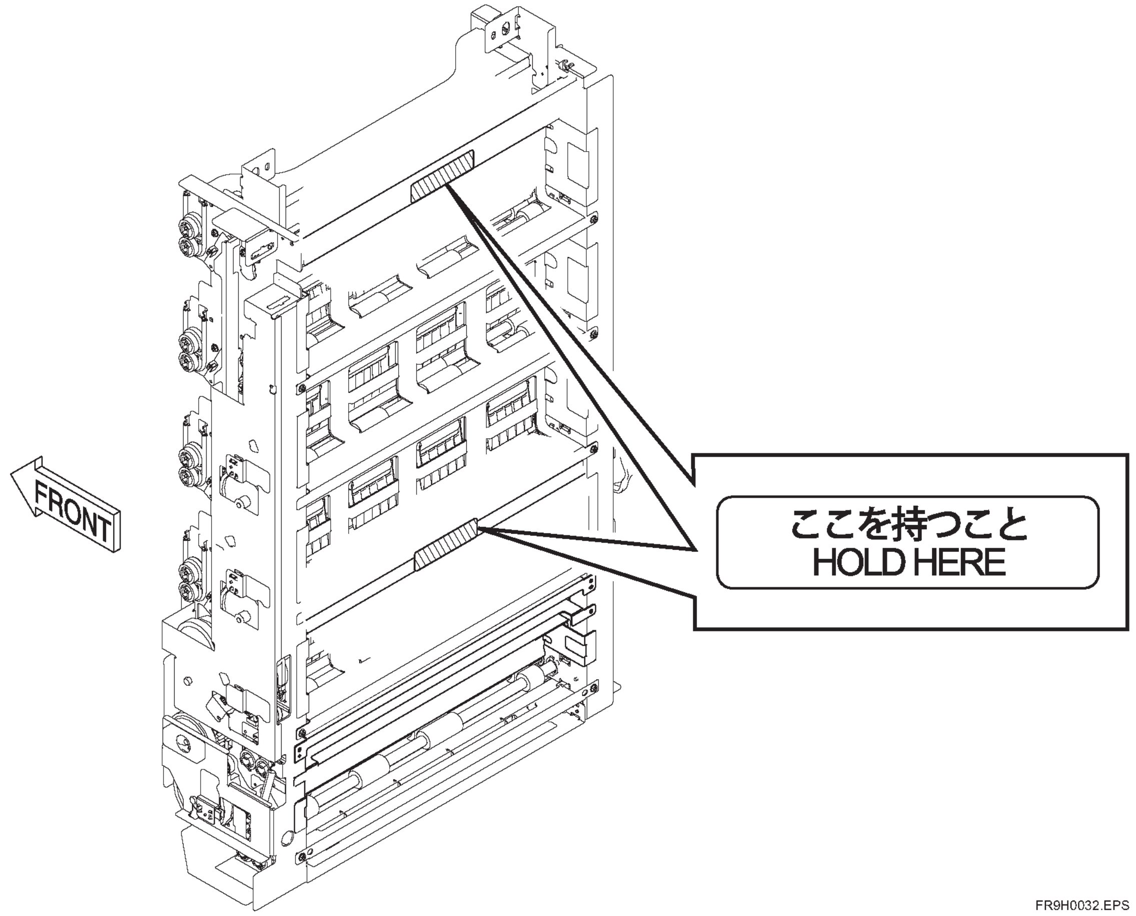
In case of CR-IR 362, a manufacturer label is not attached on equipment whose serial numbers are 50001 or those later than 50001.

2.2.2 Handling Instruction Labels and Attachment Locations

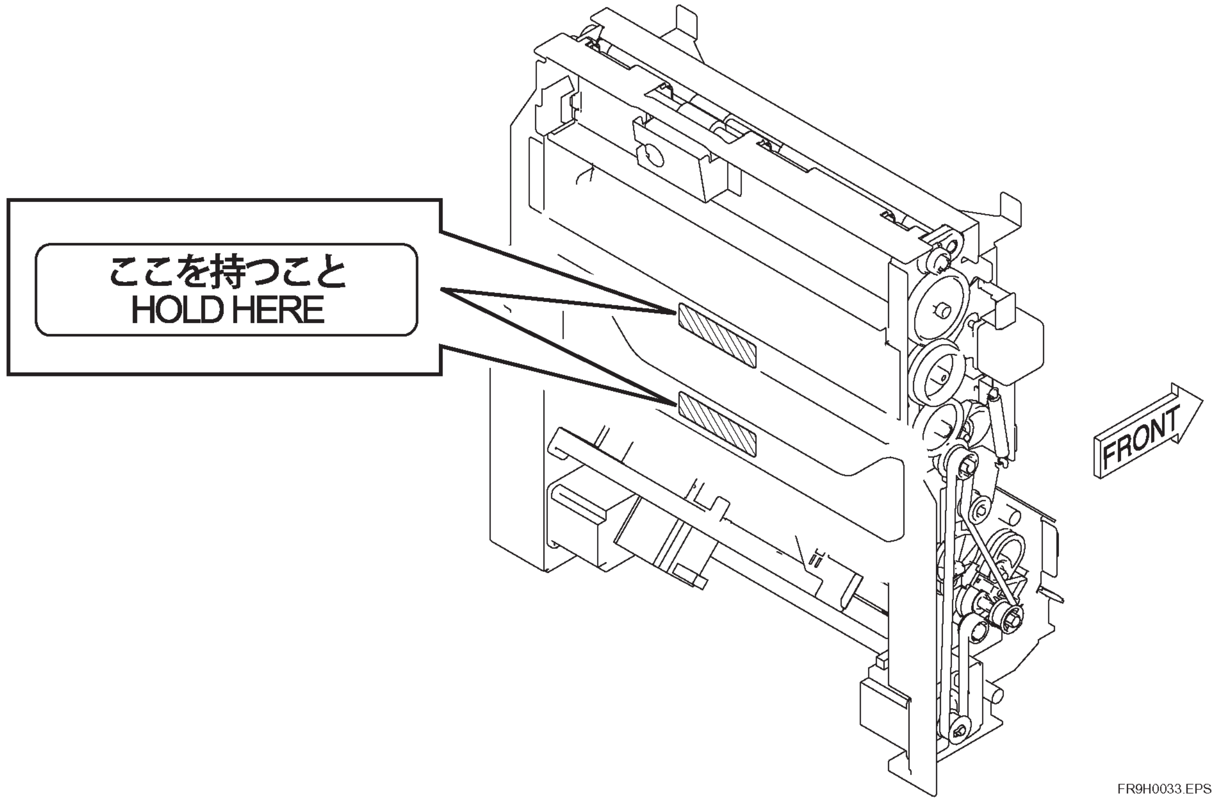
■ Cassette Set Unit


ここを持つこと
HOLD HERE
FRONT
ここを持つこと
HOLD HERE
FR9H0031.EPS

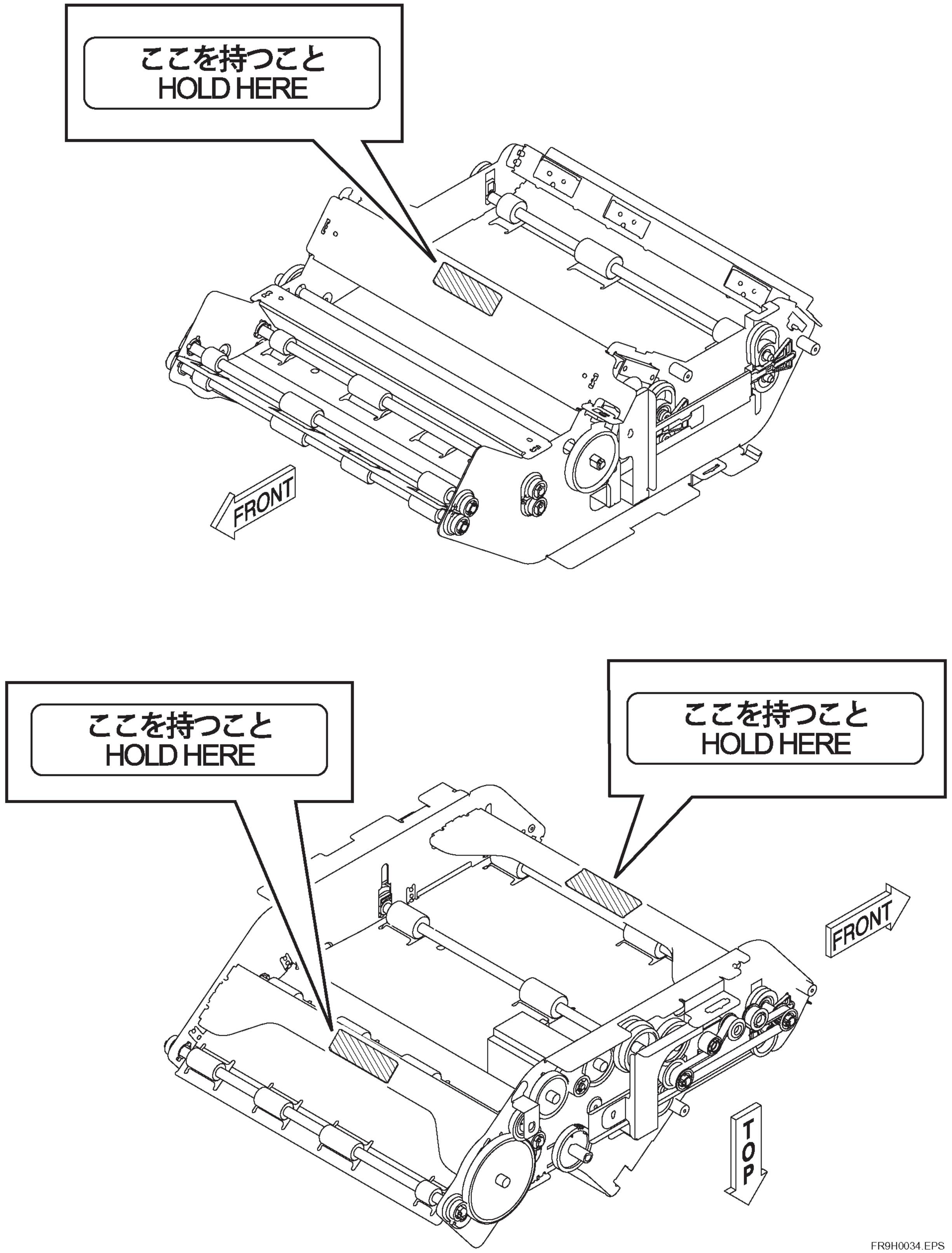
■ Feed/Load Conveyor Unit


FRONT
ここを持つこと
HOLD HERE
FR9H0032.EPS

■ Side-Positioning Conveyor Unit

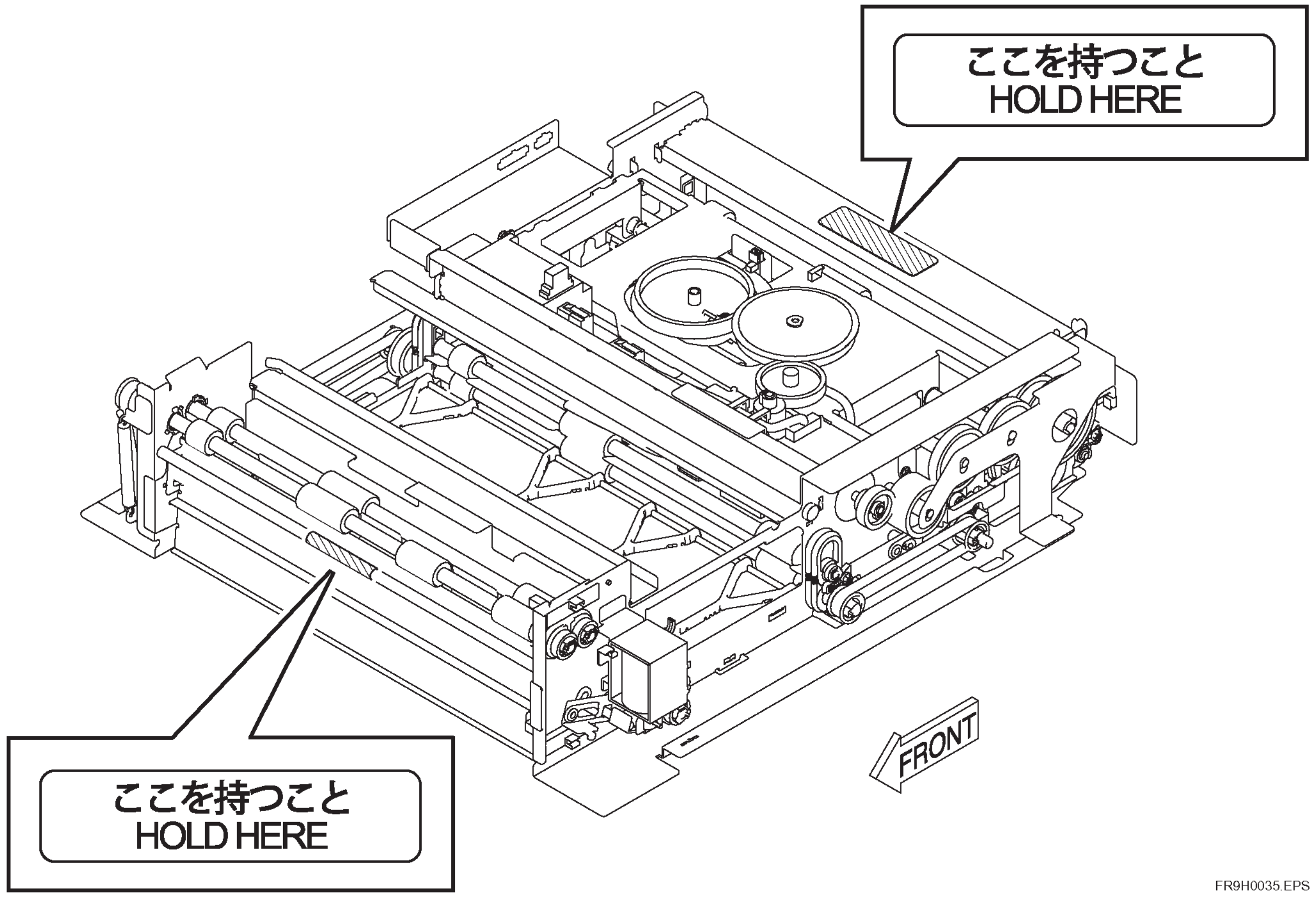

ここを持つこと
HOLD HERE
FRONT
FR9H0033.EPS

■ Post-reading conveyor unit


ここを持つこと
HOLD HERE
FRONT
ここを持つこと
HOLD HERE
ここを持つこと
HOLD HERE
FRONT
TOP

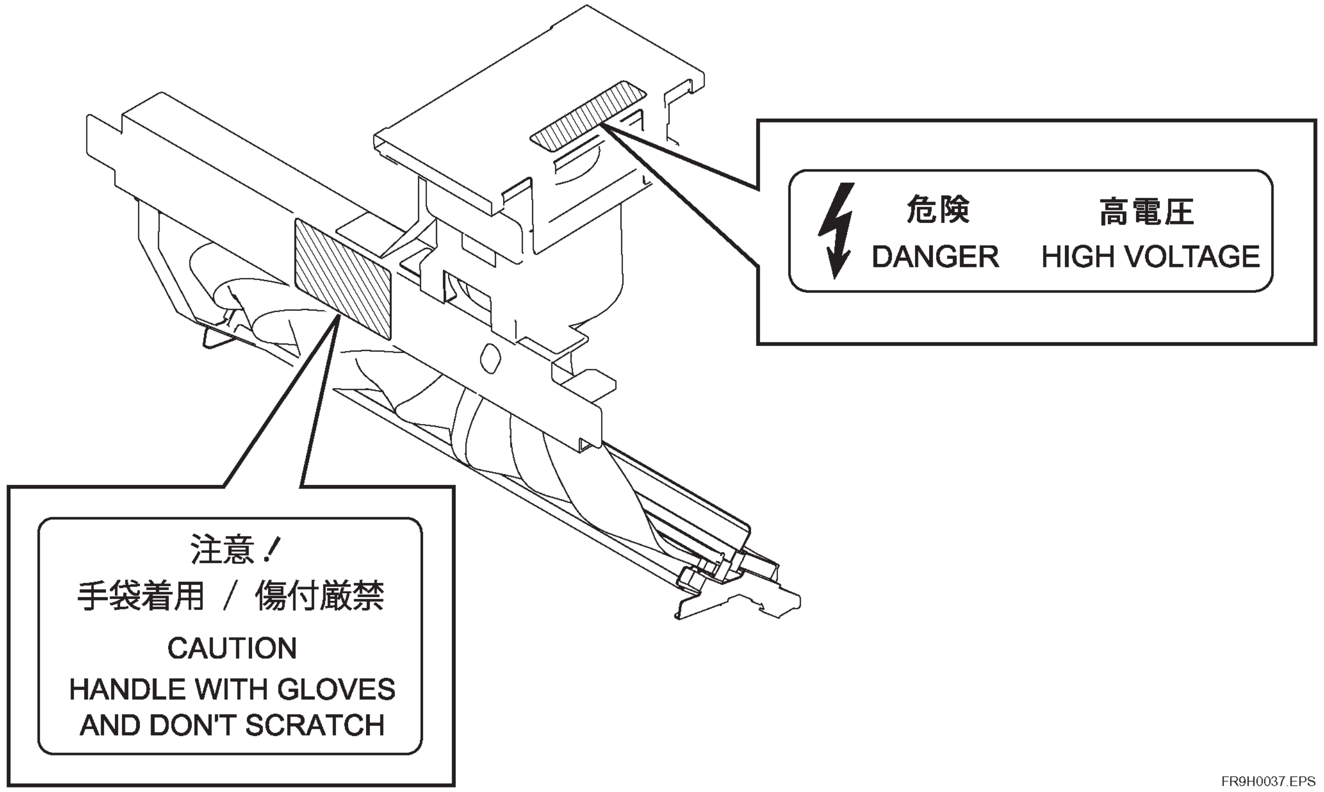
FR9H0034.EPS

■ Erasure Conveyor Unit


ここを持つこと
HOLD HERE
ここを持つこと
HOLD HERE
FRONT

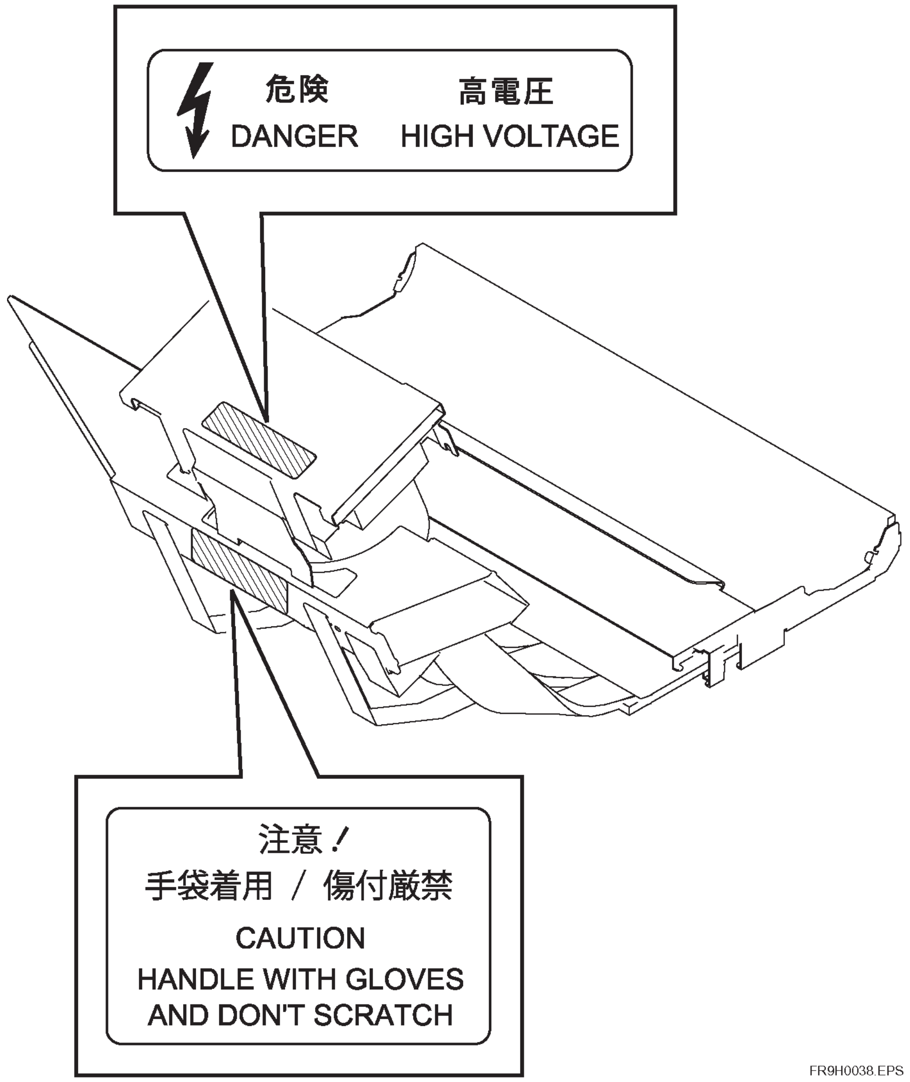
FR9H0035.EPS

■ Light-Collecting Guide (Front)


危険 DANGER
高電圧 HIGH VOLTAGE
注意！
手袋着用 / 傷付厳禁
CAUTION
HANDLE WITH GLOVES
AND DON'T SCRATCH

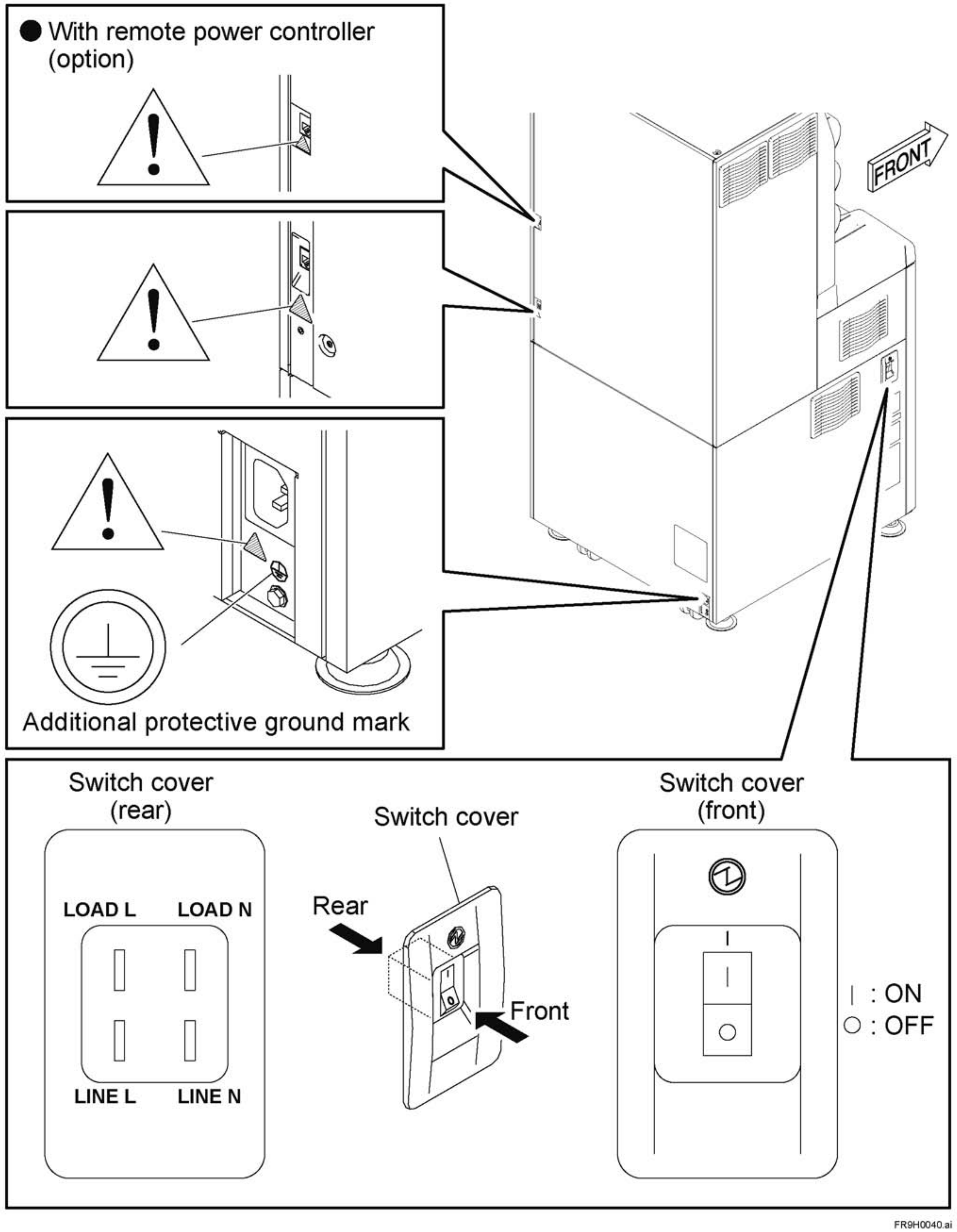
FR9H0037.EPS

■ Light-Collecting Guide (Back)

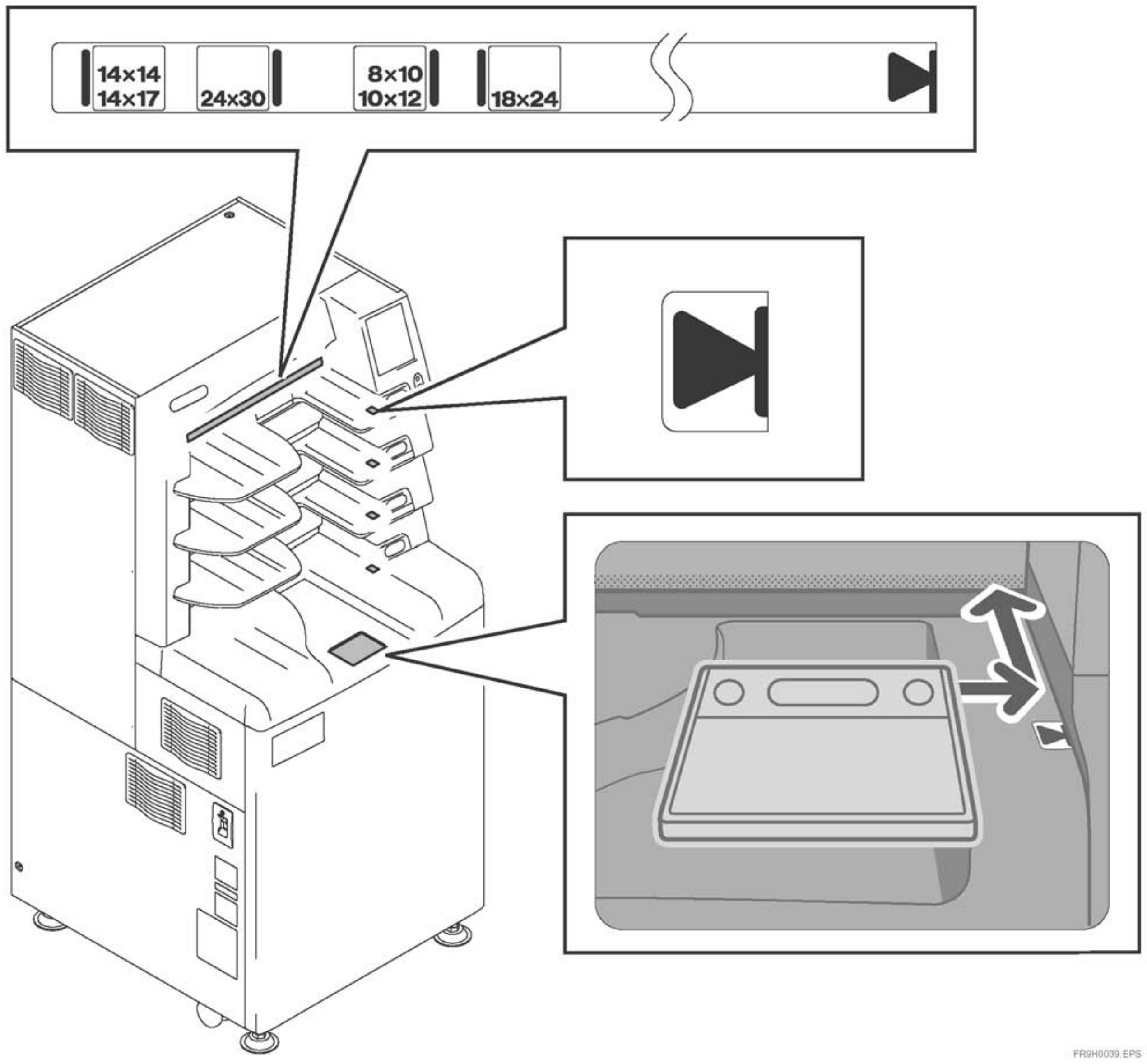

危険
DANGER
高電圧
HIGH VOLTAGE
注意！
手袋着用 ／ 傷付厳禁
CAUTION
HANDLE WITH GLOVES
AND DON'T SCRATCH

FR9H0038.EPS

■ Covers


● With remote power controller (option)
FRONT
Additional protective ground mark
Switch cover (rear)
LOAD L
LOAD N
LINE L
LINE N
Switch cover
Rear
Front
Switch cover (front)
I : ON
○ : OFF
FR9H0040.ai

■ Cassette Insertion Operation Labels

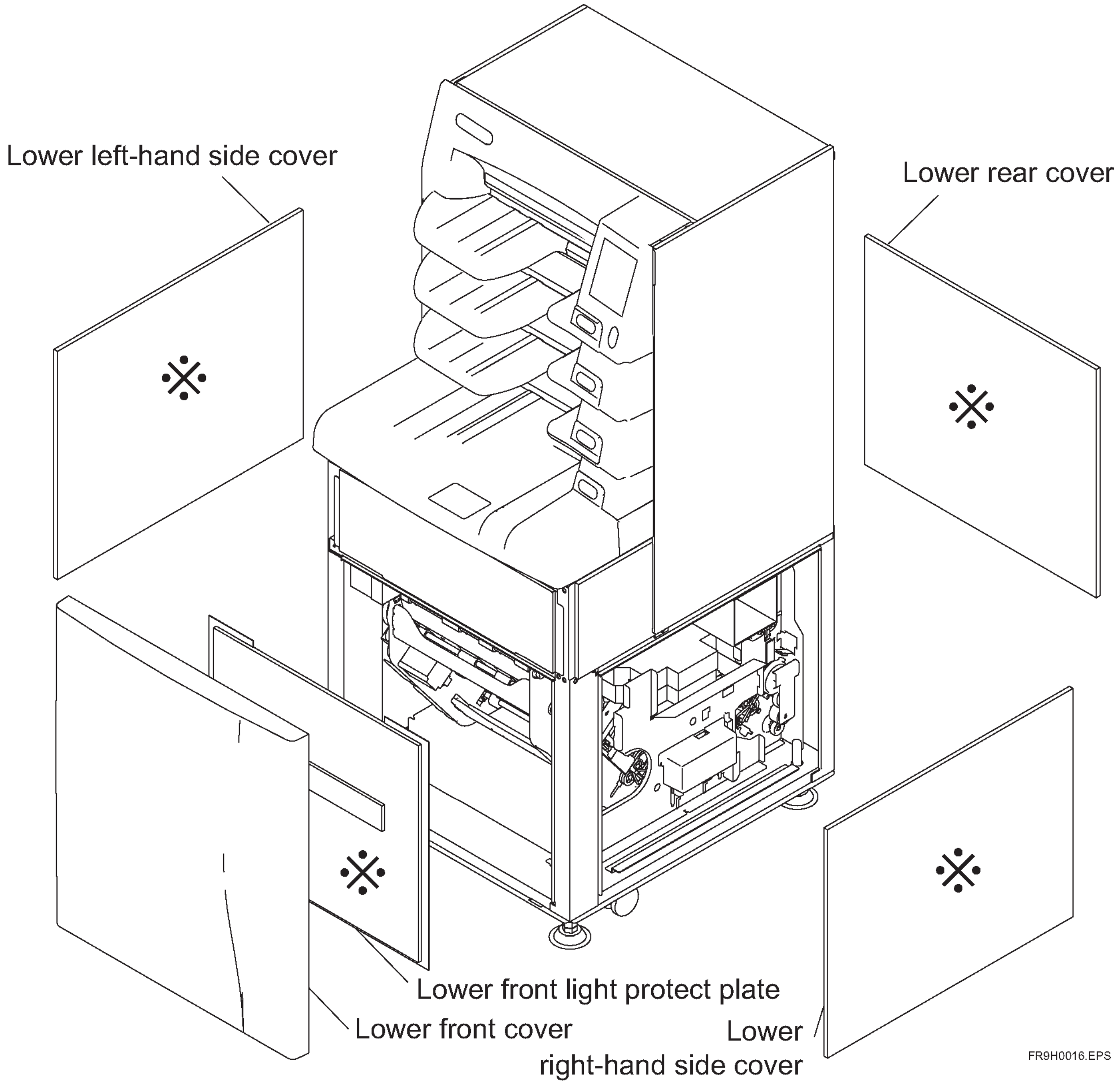

14×14
14×17
24×30
8×10
10×12
18×24
FR9H0039.EPS

3. Protective Housings Against Laser Exposure

Even when the protective housings are removed for servicing, laser beams will never leak out from the machine unless the optical path is intentionally changed. However, if the optical path is changed inadvertently during optics-related procedures, the service engineer or other people around the machine may be possibly exposed to laser radiation.
During optics-related procedures, carefully perform the procedures while checking the instructions described in this manual, and after the procedures are completed, restore the protective housings removed back exactly where they were.

■ Protective Housing of the Machine

The removable protective housings of the machine are illustrated below. The four covers marked by ※ in the illustration below are protective housings against laser exposure.


Lower left-hand side cover
Lower rear cover
※
※
※
※
Lower front light protect plate
Lower front cover
Lower right-hand side cover
FR9H0016.EPS

4. CLASSIFICATION

1. According to the type of protection against electrical shock

CLASS 1 EQUIPMENT

2. According to the degree of protection against electrical shock

NO APPLIED PART

3. Protection against harmful ingress of water

IPXO

4. According to the degree of safety of application in the presence of a flammable anesthetics mixture with air or with oxygen or nitrous oxide.

Equipment not suitable for use in the presence of a flammable anesthetics mixture with air or with oxygen or nitrous oxide.

5. According to the mode of operation

CONTINUOUS OPERATION

5. Cautions on Electromagnetic Waves

5.1 Electromagnetic Compatibility (EMC)

This equipment has been tested and found to comply with the limits for medical devices to the IEC60601-1-2 : 1993 (up to 24999), IEC60601-1-2 : 2001 (after 25001), Medical Device Directive 93/42/EEC.

These limits are designed to provide reasonable protection against harmful interference in a typical medical installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to other devices, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures;

- Reorient or relocate the receiving device.
- Increase the separation between the equipment.
- Connect the equipment into an outlet on a circuit different from that to which the other device(s) are connected.

Consult the manufacturer or field service technician for help.

5.1.1 Further information for IEC60601-1-2:2001

Model name XG5000/XG2000 is referred to as CR-IR 362 in this section.

- Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information described as follows.
- Portable and mobile RF communications equipment can affect medical electrical equipment.
- The use of accessories, transducers and cables other than those specified, with the exception of transducers and cables sold by FUJIFILM Corporation as replacement parts for internal components, may result in increased emissions or decreased immunity of the CR-IR 362.

  List of Cables

Name	FUJIFILM Corporation Parts code	General Specification
Power Cable	136N0377 (Europe) 136N0376 (UK)	-
I/F Cable	-	TIA/EIA-568 Cat5 or more. Straight cable of UTP type.

- The CR-IR 362 should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the CR-IR 362 should be observed to verify normal operation in the configuration in which it will be used.

Guidance and manufacturer's declaration - electromagnetic emissions

The CR-IR 362 is intended for use in the electromagnetic environment specified below. The customer or the user of the CR-IR 362 should assure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The CR-IR 362 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class A	The CR-IR 362 is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Guidance and manufacturer’s declaration - electromagnetic immunity

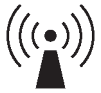
The CR-IR 362 is intended for use in the electromagnetic environment specified below. The customer or the user of the CR-IR 362 should assure that it is used in such an environment.

Immunity test	IEC 60601test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6kV contact ±8kV air	±2kV contact ±4kV contact ±6kV contact ±2kV air ±4kV air ±8kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2kV for power supply lines ±1kV for input/output lines	±2kV for power supply lines ±1kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1kV differential mode ±2kV common mode	±1kV differential mode ±2kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5 % U_T (>95% dip in U_T) for 0.5 cycle 40 % U_T (60% dip in U_T) for 5 cycles 70 % U_T (30% dip in U_T) for 25 cycles < 5 % U_T (>95% dip in U_T) for 5 s	< 5 % U_T (>95% dip in U_T) for 0.5 cycle 40 % U_T (60% dip in U_T) for 5 cycles 70 % U_T (30% dip in U_T) for 25 cycles < 5 % U_T (>95% dip in U_T) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the CR-IR 362 requires continued operation during power mains interruptions, it is recommended that the CR-IR 362 be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE: U_T is the a.c. mains voltage prior to application of the test level.

Guidance and manufacturer’s declaration - electromagnetic immunity

The CR-IR 362 is intended for use in the electromagnetic environment specified below. The customer or the user of the CR-IR 362 should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3 Vrms 150kHz - 80MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the CR-IR 362, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance**
Radiated RF IEC 61000-4-3	3 V/m 80MHz - 2.5GHz	3 V/m	$d = 1.2\sqrt{P}$ $d = 1.2\sqrt{P}$ 80 MHz - 800 MHz $d = 2.3\sqrt{P}$ 800 MHz - 2.5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

[a] Field strength from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the CR-IR 362 is used exceeds the applicable RF compliance, the CR-IR 362 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the CR-IR 362.

[b] Over the frequency range 150 kHz to 80 MHz, field strength should be less than 3 V/m.

Recommended separation distances between Portable and mobile RF communications equipment and the CR-IR 362			
The CR-IR 362 is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the CR-IR 362 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the CR-IR 362 as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter W	**Separation distance according to frequency of transmitter** m		
	150 kHz - 80 MHz $d = 1.2\sqrt{P}$	**80 MHz - 800 MHz** $d = 1.2\sqrt{P}$	**800 MH - 2.5 GHz** $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

■ For European users:

Correspondence between applicable EMC standards and serial numbers of the machine

- Machines of #20001 to #21101 conform to the EMC standards IEC 60601-1-2:1993.
- Machines of #21102 or later conform to the EMC standards IEC 60601-1-2:2001.

* The machines themselves have no difference, but the descriptions in the “Instruction Manual” attached to the machine are different.

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CR-IR 362 Service Manual

Product Specifications

Control Sheet

Issue date	Revision number	Reason	Pages affected
08.25.2003	01	New release (FM4098)	All pages
02.20.2004	03	Corrections (FM4181)	2
05.09.2005	05	Corrections (FM4610)	All pages
02.19.2007	07	Change of document number (FM5097)	All pages
09.30.2009	09E	Revision (FM5539)	1, 4

1. Specifications of Machine

1.1 Product Code

Product code	Item	Qty.	Remarks
CR IR 362 RU E	FCR XG5000 (For outside Japan) Image reader machine main body CR-IR 362	1	#20001 or Later
CR IR 362 RU ED2 E	FCR XG5000 (For outside Japan, Support ED2) Image reader machine main body CR-IR 362	1	#20001 or Later
CR IR 362 RU ED2 * E	FCR XG5000 (For outside Japan) Image reader machine main body CR-IR 362 Minor change machine	1	#50001 or Later
CR IR 362 RU USA E	FCR XG5000 (For USA) Image reader machine main body CR-IR 362	1	#20001 or Later
CR IR 362 RU USA * E	FCR XG5000 (For USA) Image reader machine main body CR-IR 362 Minor change machine	1	#50001 or Later
CR IR 362 RU USA W A/C E	FCR XG5000 (For USA) Image reader machine main body CR-IR 362	1	#20001 or Later
CR IR 362 RU USA 2STACKER E	FCR XG2000 (For USA) Image reader machine main body CR-IR 362	1	#20001 or Later
CR IR 362 RU USA 2STACKER * E	FCR XG2000 (For USA) Image reader machine main body CR-IR 362 Minor change machine	1	#50001 or Later
CR IR 362 RU ED2 CN E	FCR XG5000 (For China) Image reader machine main body CR-IR 362	1	#20001 or Later
CR IR 362 RU ED2 CN * E	FCR XG5000 (For China) Image reader machine main body CR-IR 362 Minor change machine	1	#50001 or Later
CR IR 362 RU PH	FCR XG5000 (For Philips, OEM specifications) Image reader machine main body CR-IR 362	1	#20001 or Later
CR IR 362 RU ED2 PH	FCR XG5000 (For Philips, OEM specifications, Support ED2) Image reader machine main body CR-IR 362	1	#20001 or Later
CR IR 362 RU ED2 * PH	FCR XG5000 (For Philips,OEM specifications, Support ED2) Image reader machine main body CR-IR 362 Minor change machine	1	#50001 or Later

1.2 Available IP Sizes and Types

This equipment can automatically recognize inch/metric. The IP sizes of available inch/metric are listed below.

Inch settings	ST-VI/ST-VN (standard type):	14”x17”, 14”x14”, 10”x12”, 8”x10”
	HR-V (high resolution type):	24x30cm, 18x24cm
Metric settings	ST-VI/ST-VN(standard type):	35x43cm, 35x35cm, 24x30cm, 18x24cm
	HR-V(high resolution type):	24x30cm, 18x24cm

1.3 List of Optional Items

Product code	Item	Qty.	Remarks
IR 362 FLOOR FIX KIT #(E)	Anti-topple retainer kit	1	- For retaining the machine - #20001 or Later
IR 362 FLOOR FIX KIT * #(E)	Anti-topple retainer kit Minor change machine compatible	1	- For retaining the machine - #50001 or Later
IR 362 AC CORD P 100-120V #	Patient environment installation kit	1	
IR 362 AC CORD 100-120V UL E	FOR USA AC power cable for machine main body	1	
IR REMOTE POWER CONTROLLER #(E)	Remote power controller	1	
IR BCR BD-CS ID #(E)	Both-side cassette identification barcode reader	1	- For preventing wrong insertion of the cassette - #20001 or Later
IR BCR BD-CS ID * #(E)	Both-side cassette identification barcode reader Minor change machine compatible	1	- For preventing wrong insertion of the cassette - #50001 or Later
IR 362 UPGRADE KIT USA E	XG2000→XG5000 Up grade kit (For USA)	1	#20001 or Later

1.4 Product Specifications

■ Maximum Heat Generation

Standby: 340 W approx.
Operating: 500 W approx.

■ Noise

Standby: 50 dB or less
Operating: 60 dB or less

■ Warm-up Time

- **Power non-interlinked setting (when RU is started up alone)**

  2 min 30 sec approx.

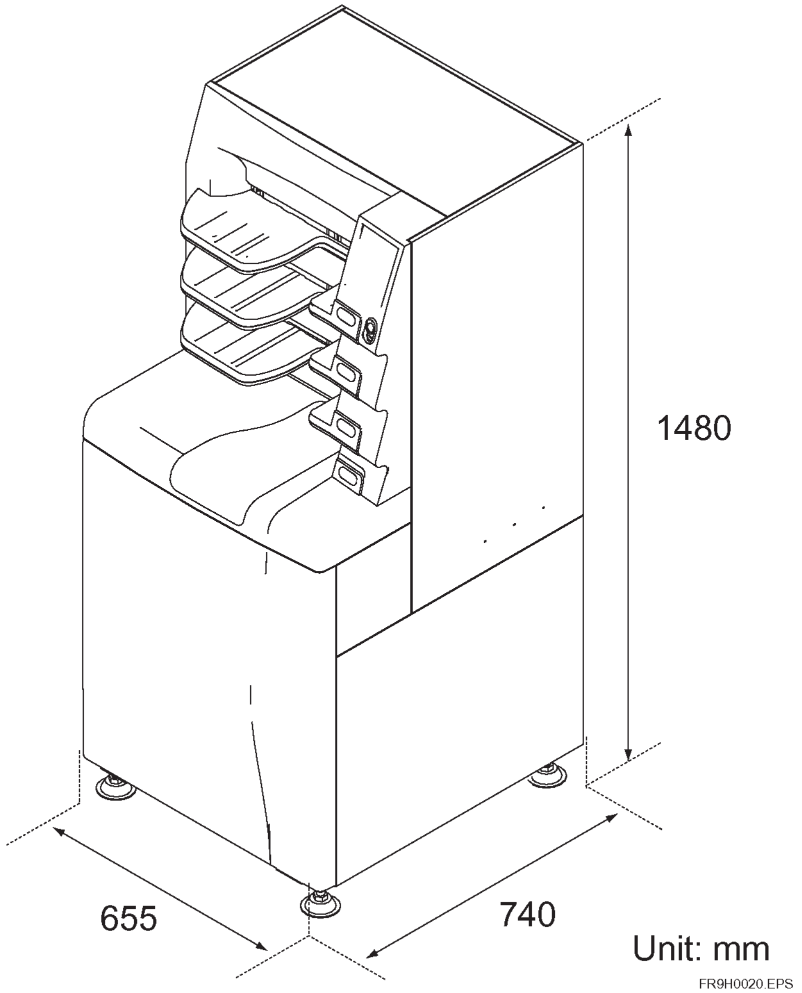
- **Power interlinked setting (when RU is started up by CL)**

  2 min 30 sec approx.

1.5 Dimensions, Weight, and Center of Gravity

■ Dimensions

W655×D740×H1480 (mm)



■ Weight

285 kg approx.

■ Center of Gravity

Height: 485 mm
From right-hand side: 345 mm
From front: 355 mm

◆ NOTE ◆

The center of gravity is as measured from the adjustable foot.

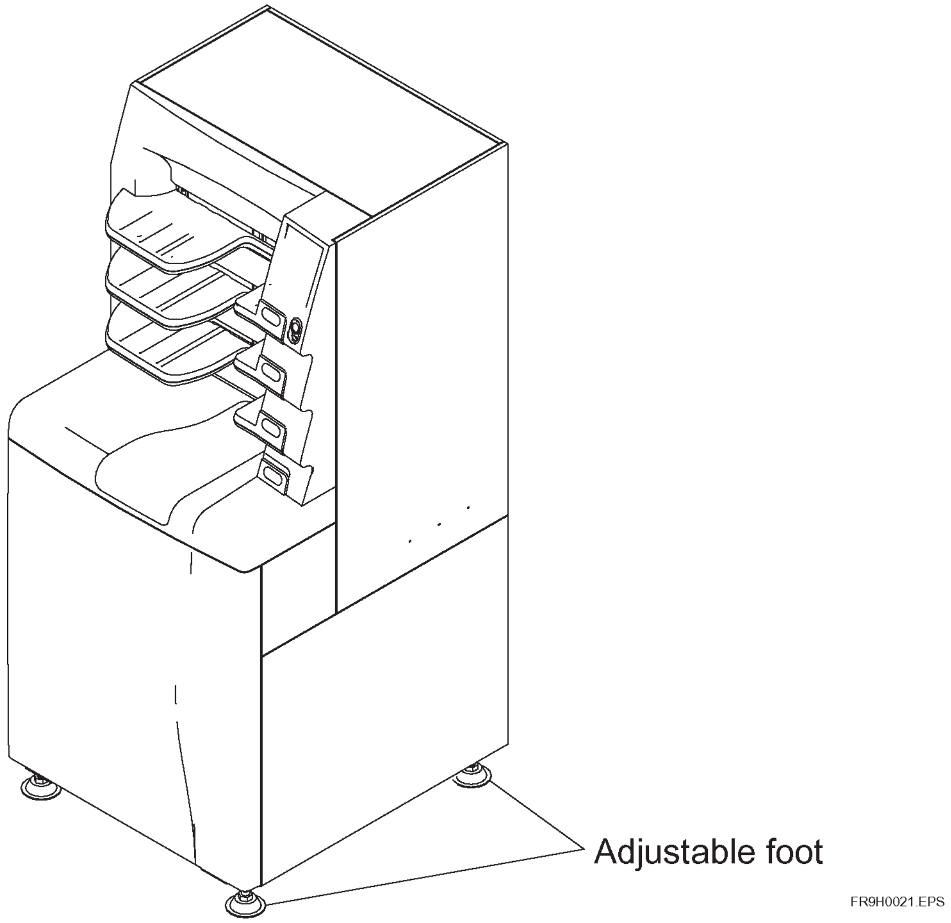
1.6 Means for Moving and Fixing the Machine

■ Moving Means

Double-wheel caster (variable-direction/no-brake) x4

■ Fixing Means

- Adjustable foot x4, or retaining member x2

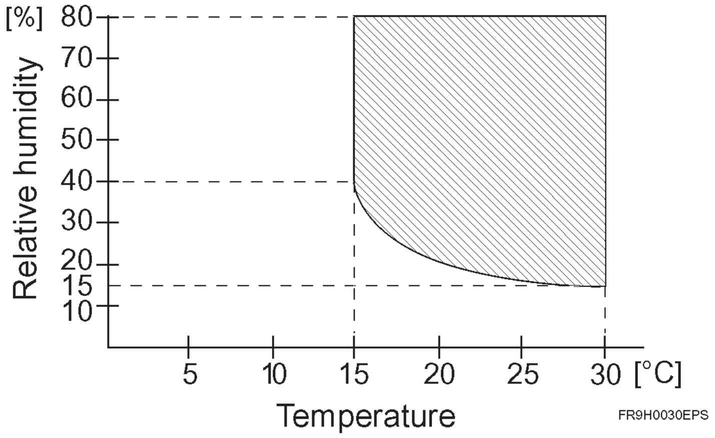


1.7 Environmental Conditions

■ Climate Conditions

● Operating

Temperature:	15 to 30°C
Relative humidity:	40 to 80% RH
Atmospheric pressure:	70 to 1030 hPa
Heat generation:	500 W approx.



● Non-operating

Temperature:	0 to 45°C
Relative humidity:	10 to 90% RH (without moisture condensation)
Atmospheric pressure:	500 to 1030 hPa

● Transit/storage

Temperature:	-10 to 50°C
Relative humidity:	10 to 90% RH (without moisture condensation)
Atmospheric pressure:	500 to 1060 hPa

■ Floor (Machine Surface) Vibration

10 to 55 Hz in frequency and 0.0075 mm or less in amplitude

■ Floor Levelness

10 mm/m (inclination: 1/100 or less), for front, rear, right, and left

■ Floor Flatness

10 mm/m or less

■ Variable Magnetic Field

DC 0.3 Gauss or less

1.8 Electrical Specifications

■ Frequency

Single-phase, 50-60Hz, ±3%

■ Input Voltage

Single-phase, 120-240V~(AC)±10%

■ Capacity

0.77 kVA

■ Rated Amperage

Single-phase, 120-240V~(AC)±10%, 50-60Hz : 7A

■ Power Consumption

Maximum:	770 W

■ Watt-Hour

Operating:	420 Wh
Standby:	300 Wh
Power-down mode:	300 Wh
Sleep mode:	200 Wh
Remote standby:	15 Wh or less

■ Grounding

Class D grounding (former Class 3 grounding) (100 Ω or less)

■ Overload Protection

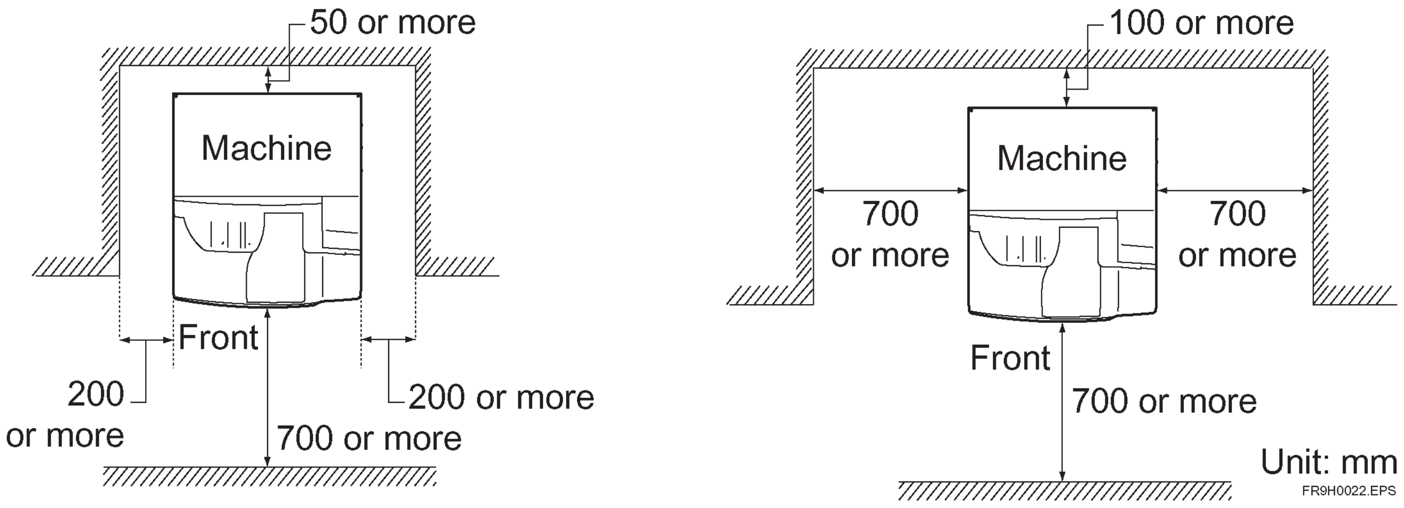
10 A

■ Power Cord

3 m, with 3P plug and connector

1.9 Installation Space and Servicing Space

■ Installation Space

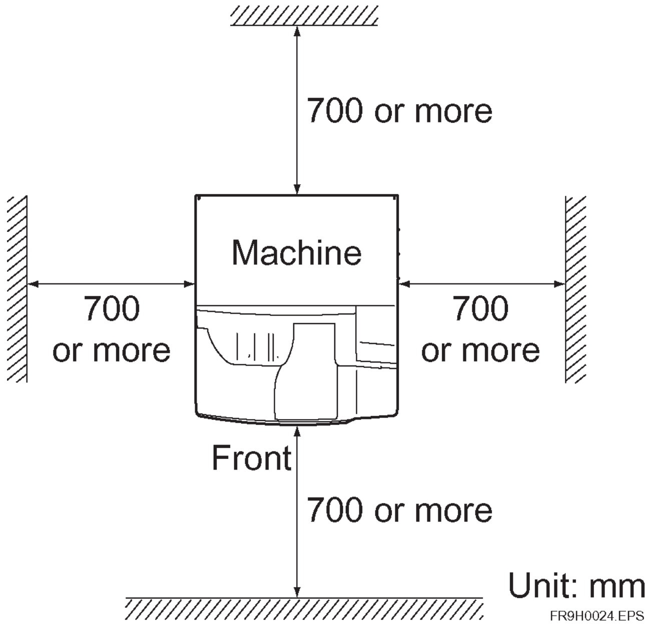


- For fixing by adjustable feet
- For fixing by retaining members

50 or more
Machine
Front
200
or more
200 or more
700 or more
100 or more
Machine
700
or more
700
or more
Front
700 or more
Unit: mm
FR9H0022.EPS

■ Servicing Space

When servicing the machine, the space indicated below should be secured.



700 or more
Machine
700
or more
700
or more
Front
700 or more
Unit: mm
FR9H0024.EPS

1.10 Disposal

1.10.1 Disposal of Machine

When the machine is to be disposed of, the IMG17A/B board, which contains a battery, should be removed from the machine before its disposal.
Be sure to return the removed IMG17A/B board to the Parts Center.

1.10.2 Disposal of IP

Regarding the IP disposal, follow the instructions to dispose as laws are provided in each country and region. We will provide the product safety information as needed.

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CR-IR 362 Service Manual

Machine Description (MD)

Control Sheet

Issue date	Revision number	Reason	Pages affected
08.25.2003	01	New release (FM4098)	All pages
02.20.2004	03	Correction (FM4181)	11
02.19.2007	07	Change of document number, corrections (FM5097)	All pages
09.30.2008	08	Revision (FM5340)	42, 57-83
09.30.2009	09E	Revision (FM5539)	2, 13-91

1. Machine Overview

1.1 Features

■ Features of the Machine

- **The machine is network connectable via TCP/IP (100BASE-TX).**
- **A commonly available power source may be used to supply power to the machine.**
- **Improved throughput**

  To support institutions that conduct large amounts of processing, four shelves of cassette inserting entrances are provided to ensure improved throughout.
- **Removal of IP static electricity**

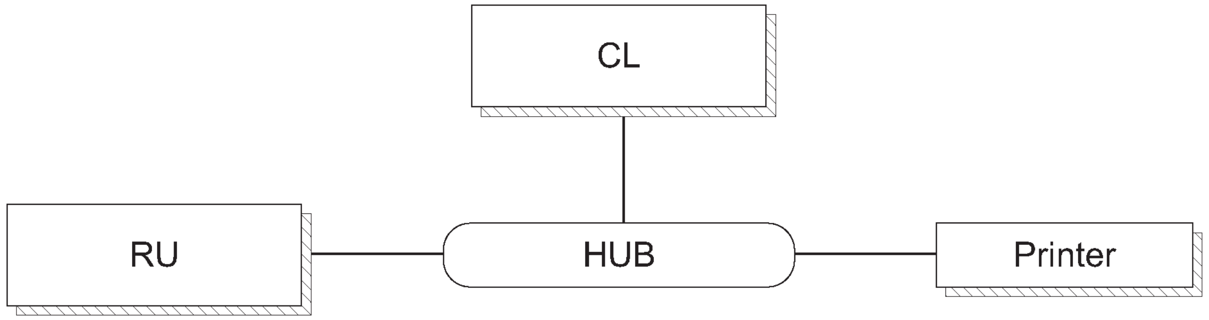
  IP static electricity is removed by the electrically-conductive ball bearing and bearing for each conveyance roller, as well as by the antistatic brush.

1.2 System Configuration

The machine (CR-IR362) may be connected to a network to achieve various system configurations.
Basic system configuration examples are described here.

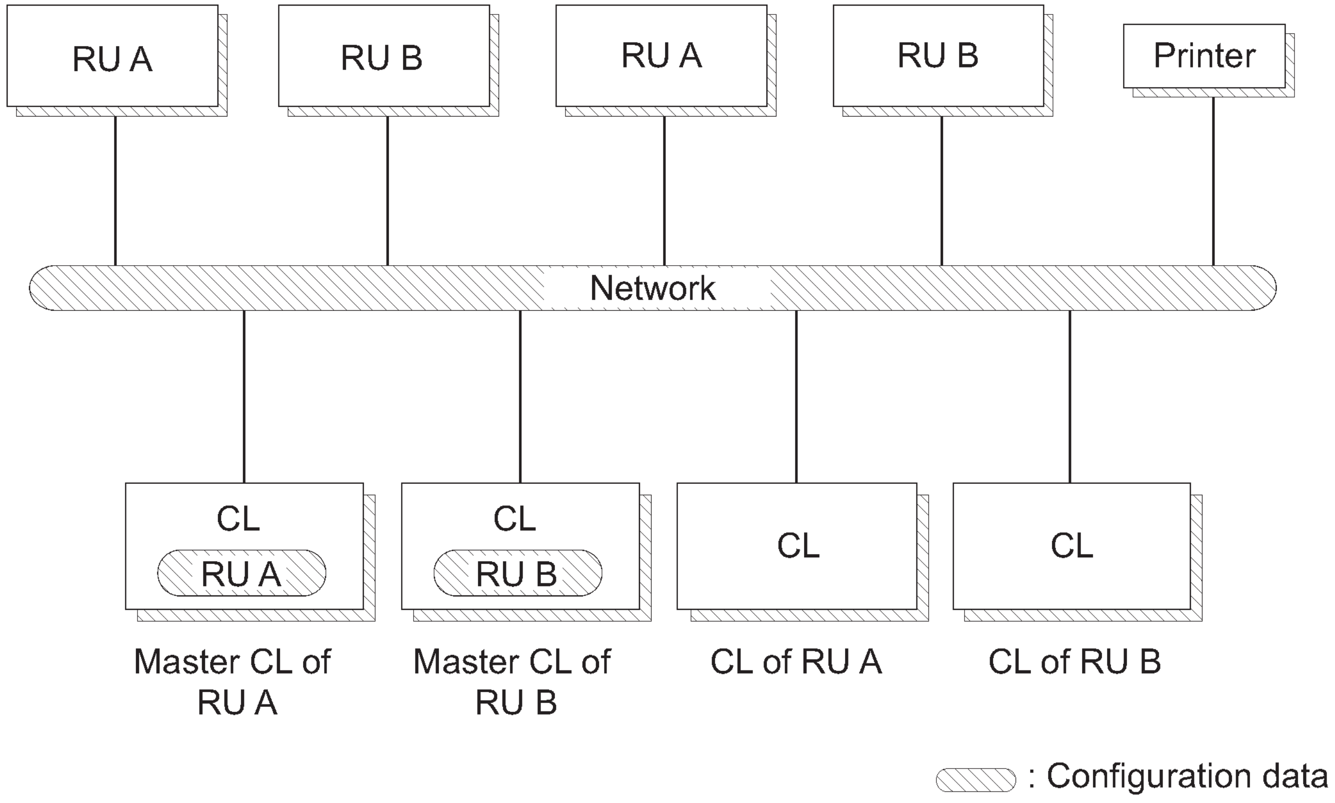
■ System Configuration Example (1)

The machine is connected to the CL via a network.
A connection with the CL is established over Ethernet (100Base-TX).


CL
RU
HUB
Printer
FR9H1001.EPS

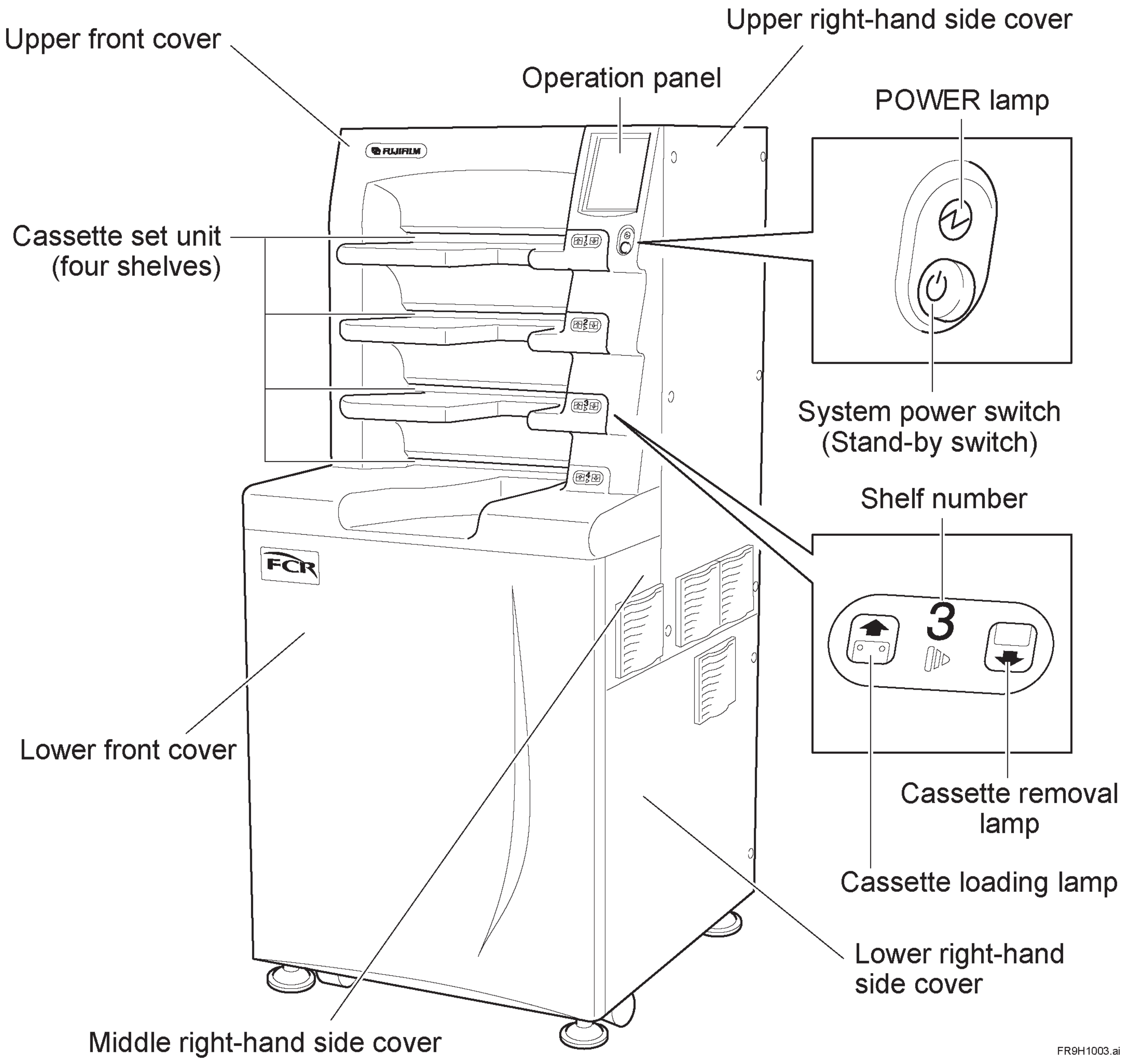
■ System Configuration Example (2)

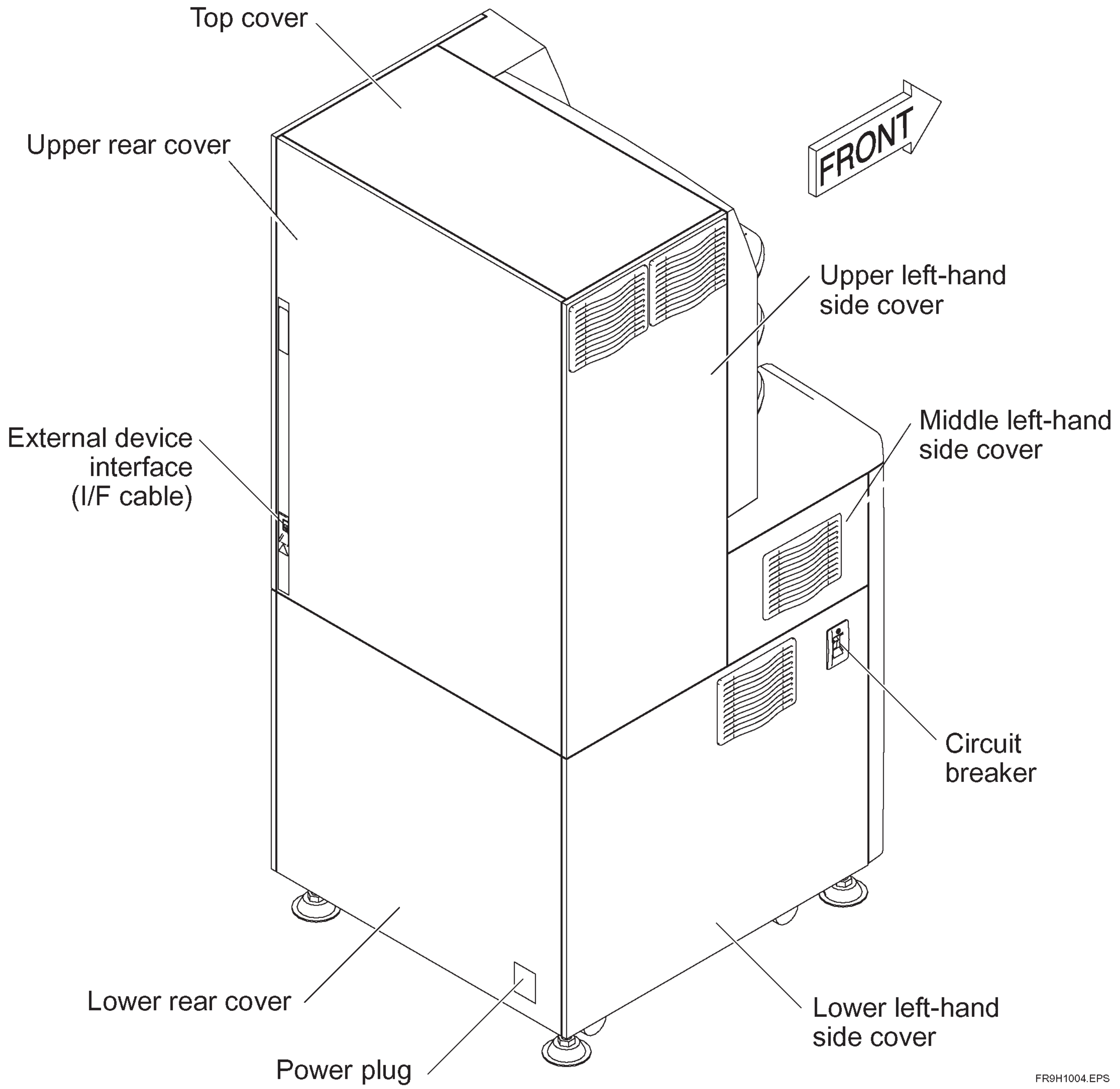
The machine may be connected to a plurality of CLs, including a single master CL.
The master CL contains the RU's configuration data and other information.


RU A
RU B
RU A
RU B
Printer
Network
CL
RU A
CL
RU B
CL
CL
Master CL of RU A
Master CL of RU B
CL of RU A
CL of RU B
▨ : Configuration data
FR9H1002.EPS

1.3 Overall Machine Configuration and Component Names

■ External View of Machine

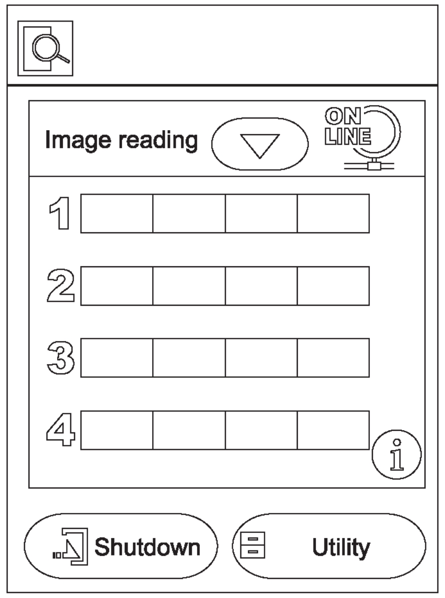

Upper front cover
Upper right-hand side cover
Operation panel
POWER lamp
Cassette set unit
(four shelves)
System power switch
(Stand-by switch)
Shelf number
3
Lower front cover
Cassette removal
lamp
Cassette loading lamp
Lower right-hand
side cover
Middle right-hand side cover
FR9H1003.ai


Top cover
FRONT
Upper rear cover
Upper left-hand
side cover
Middle left-hand
side cover
External device
interface
(I/F cable)
Circuit
breaker
Lower rear cover
Lower left-hand
side cover
Power plug
FR9H1004.EPS

■ Nomenclature and Functions

Name	Function
Operation panel	Operation panel for the RU main body.
POWER lamp	It is lit (in green) when the circuit breaker is pushed in the "I" position and power is turned ON. Since the circuit breaker remains in the ON state, the POWER lamp is always lit.
System power switch	Power switch for the RU. When this switch is pressed with the system power switch in the RU setting and the circuit breaker in the ON state, the RU is powered ON.
Cassette set unit (four shelves)	This unit accommodates cassettes that contain exposed IPs. A cassette may be loaded into an unloaded shelf of the cassette feeder.
Cassette loading lamp	It is lit (in green) when the RU starts up normally, indicating that cassette loading is ready. While it is not lit, a cassette cannot be loaded.
Cassette removal lamp	It is lit (in green) when removal of a processed cassette is ready.
Dust filter	It is attached in the entrance of the air-intake fan.
Circuit breaker	It should normally be in the ON position.

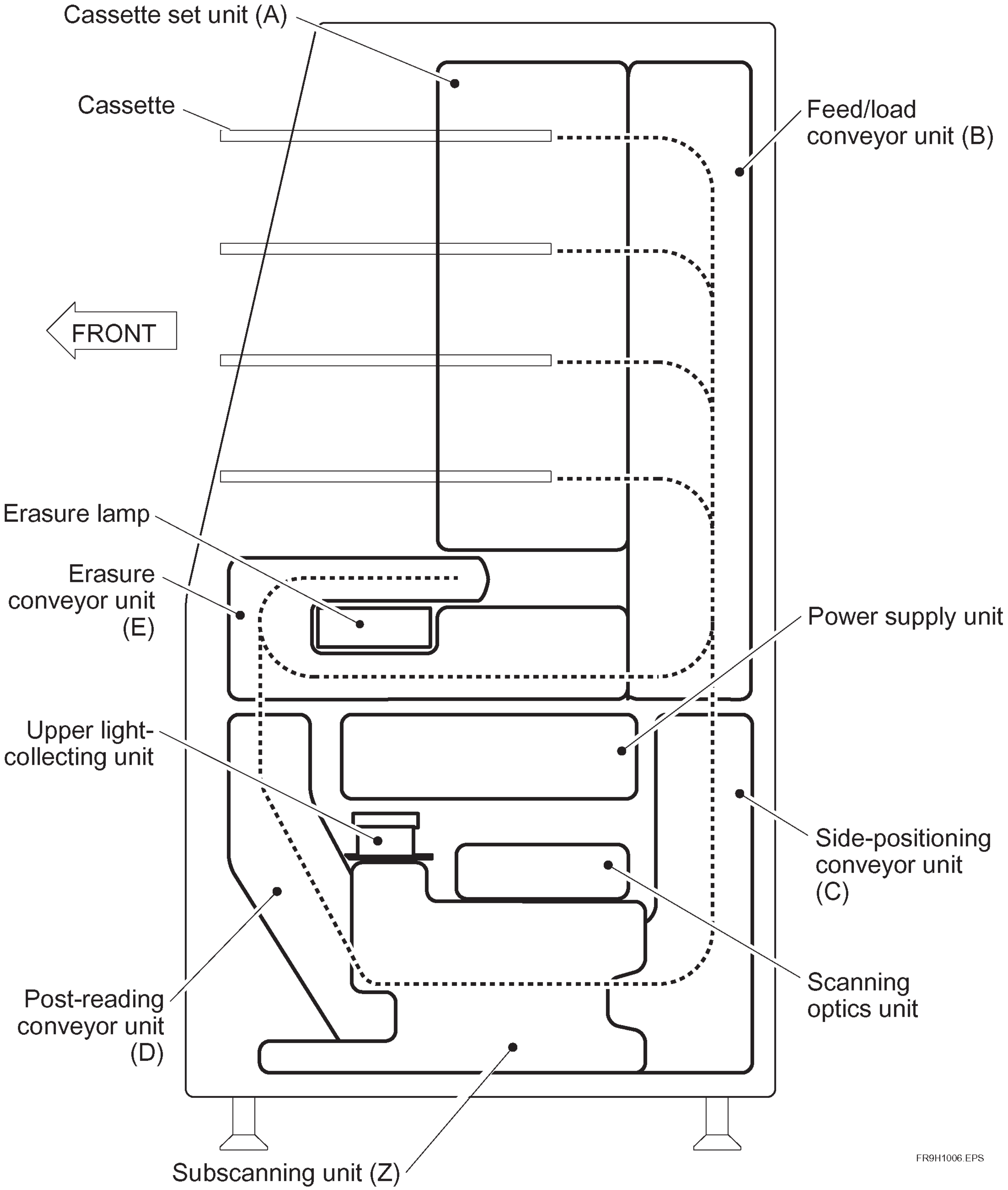
■ Operation Panel



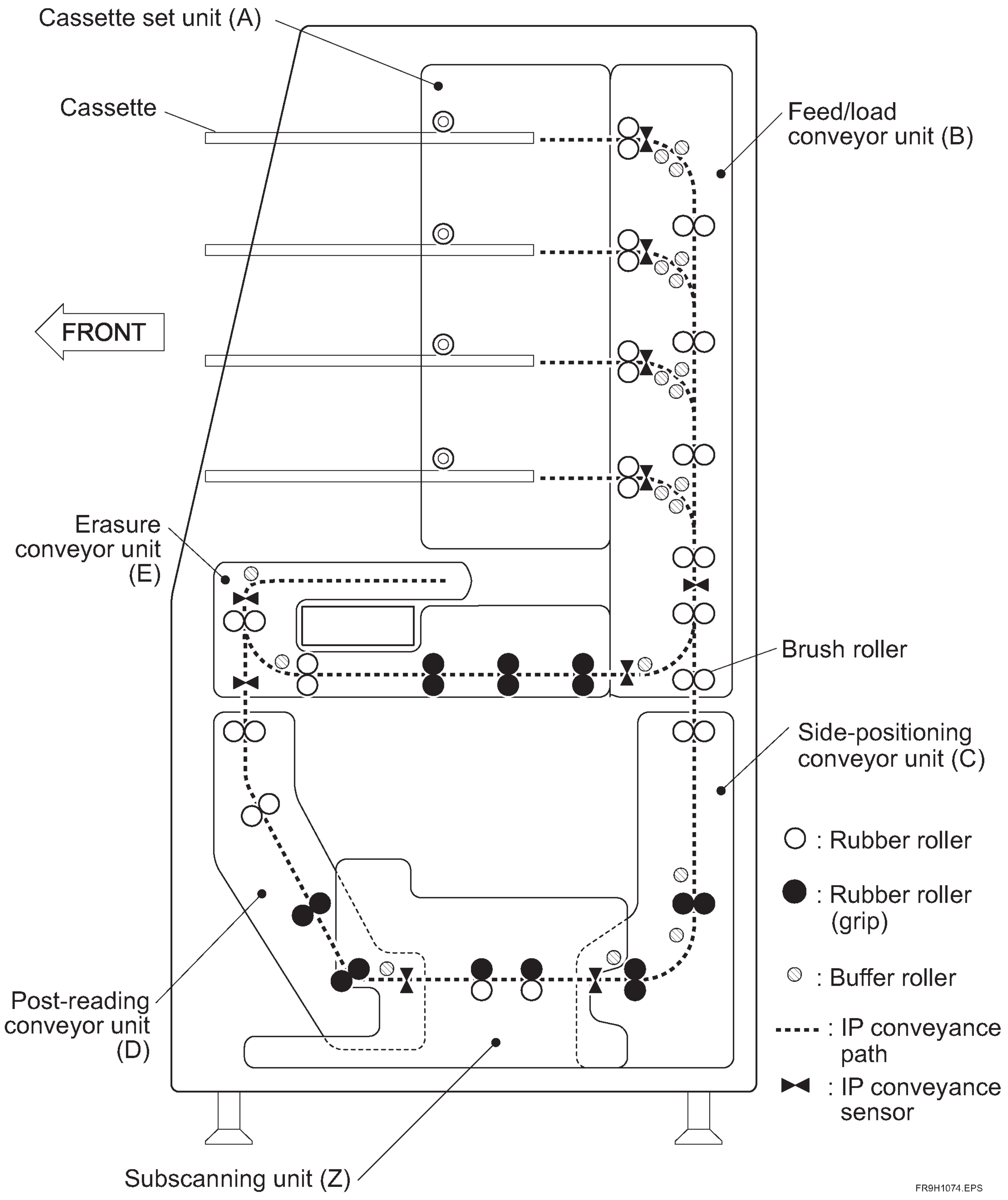
FR9H1106.EPS

1.4 Machine Components

1.4.1 Unit Locations


Cassette set unit (A)
Cassette
FRONT
Feed/load conveyor unit (B)
Erasure lamp
Erasure conveyor unit (E)
Power supply unit
Upper light-collecting unit
Side-positioning conveyor unit (C)
Post-reading conveyor unit (D)
Scanning optics unit
Subscanning unit (Z)
FR9H1006.EPS

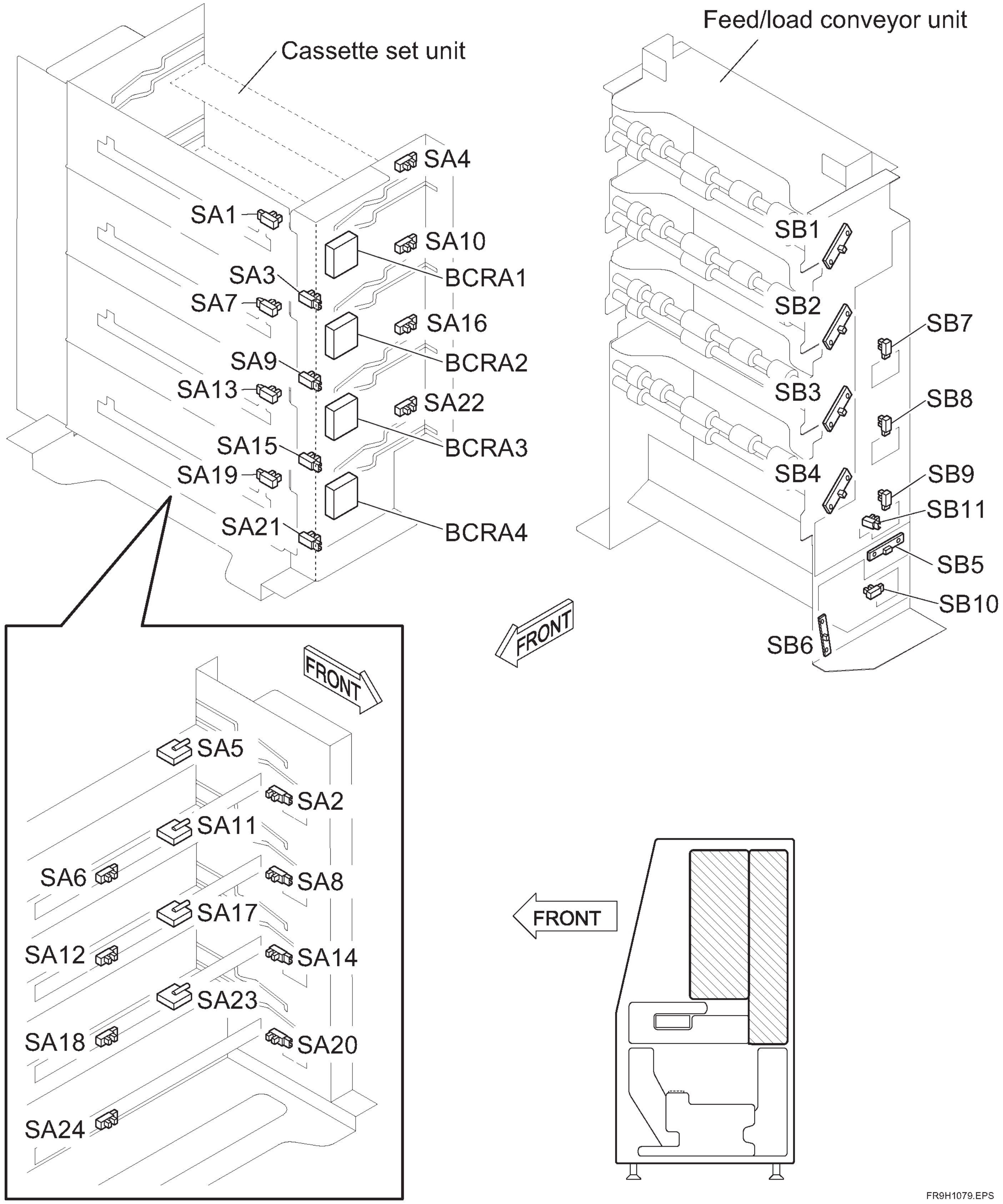
1.4.2 Roller Locations and Conveyance Paths


Cassette set unit (A)
Cassette
FRONT
Feed/load conveyor unit (B)
Erasure conveyor unit (E)
Brush roller
Side-positioning conveyor unit (C)
○ : Rubber roller
● : Rubber roller (grip)
⊘ : Buffer roller
----- : IP conveyance path
⋈ : IP conveyance sensor
Post-reading conveyor unit (D)
Subscanning unit (Z)
FR9H1074.EPS

1.4.3 I/O Locations and Functional Descriptions

■ I/O Locations: Cassette Set Unit and Feed/Load Conveyor Unit

Locations of the sensors and barcode reader are illustrated below.


Feed/load conveyor unit
Cassette set unit
SA4
SA1
SA10
BCRA1
SA3
SA7
SA16
SA9
BCRA2
SA13
SA22
SA15
BCRA3
SA19
SA21
BCRA4
SB1
SB2
SB7
SB3
SB8
SB4
SB9
SB11
SB5
SB10
SB6
FRONT
FRONT
SA5
SA2
SA11
SA6
SA8
SA17
SA12
SA14
SA23
SA18
SA20
SA24
FRONT
FR9H1079.EPS

A list of sensor and barcode reader names and functions is presented below.

- **Cassette set unit**

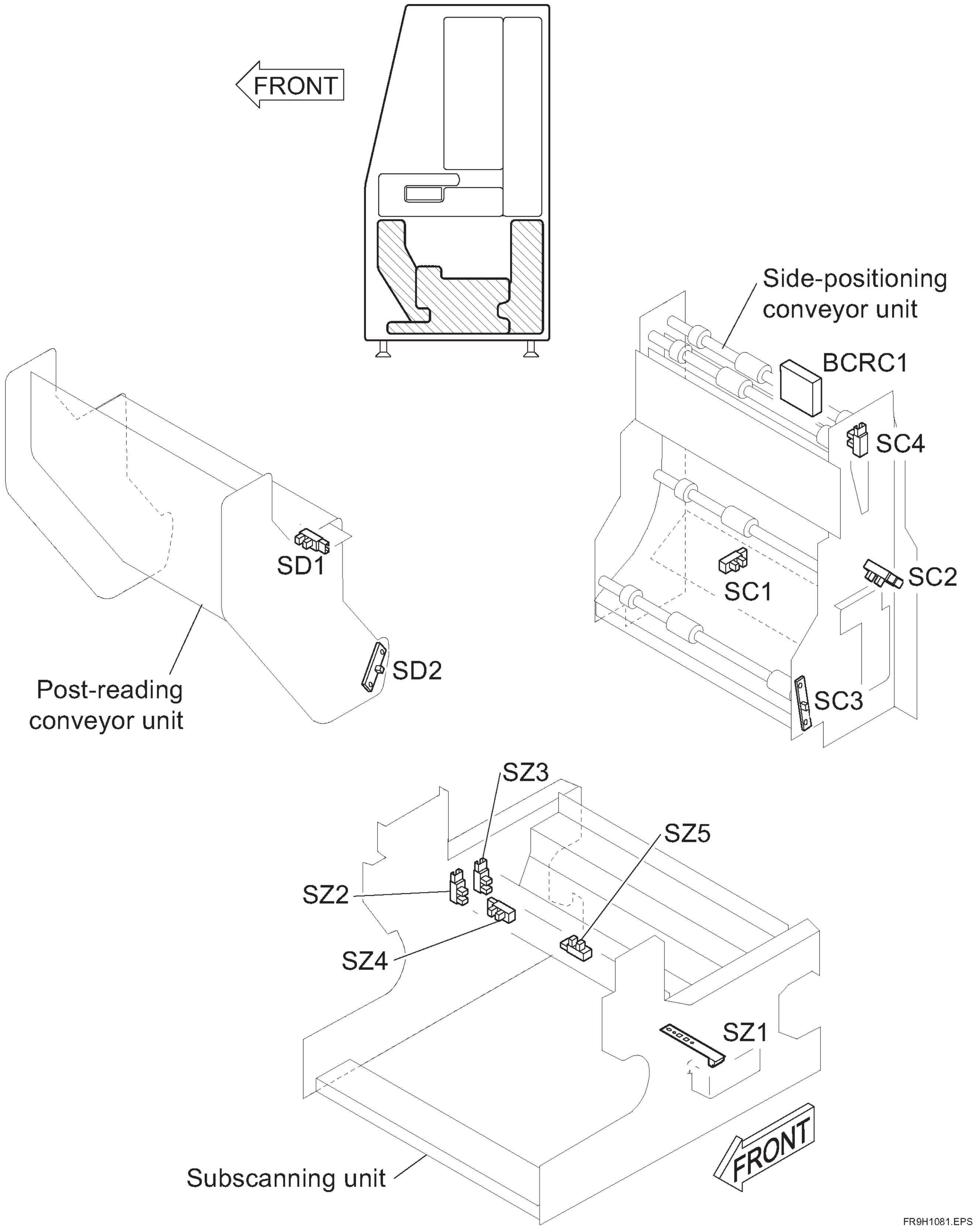
Symbol	Name	Type	Function
SA1, 7, 13, 19	Cassette ejection sensor	PI (5mm)	Detects that the cassette has been ejected.
SA2, 8, 14, 20	Cassette IN sensor	PI (5mm)	Detects that the cassette has been inserted.
SA3, 9, 15, 21	Cassette hold sensor	PI (5mm)	Detects that cassette hold has been completed.
SA4, 10, 16, 22	Suction cup HP sensor	PI (5mm)	Detects that the suction cup arm is in its home position.
SA5, 11, 17, 23	Suction sensor	Suction sensor	Detects that the suction cup has sucked the IP.
SA6, 12, 18, 24	Inch/metric sensor	PI (5mm)	Determines the IP width.
BCRA1, 2, 3, 4	Barcode reader		Scans the barcode of a dual-surface IP cassette.

- **Feed/load conveyor unit**

Symbol	Name	Type	Function
SB1, 2, 3, 4	IP feed/load sensor (cassette side)	PI (19mm)	Detects that an IP being conveyed is present.
SB5	Pre-BCR IP sensor	PI (19mm)	Detects that an IP being conveyed is present.
SB6	Pre-convergence IP sensor	PI (19mm)	Detects that an IP being conveyed is present.
SB7, 8, 9	Path changeover shelf sensor	PI (5mm)	Detects the position of the path changeover guide.
SB10	Convergence path changeover sensor	PI (5mm)	Detects the position of the convergence path changeover guide.
SB11	Path changeover HP sensor	PI (5mm)	Detects the machine's initial position and the position of the path changeover guide.

I/O Locations: Side-Positioning Conveyor Unit, Subscanning Unit, and Post-Reading Conveyor Unit

Locations of the sensors and barcode reader are illustrated below.



A list of sensor and barcode reader names and functions is presented below.

● Side-positioning conveyor unit

Symbol	Name	Type	Function
SC1	Side-positioning mechanism HP sensor	PI (5mm)	Detects that the side-positioning mechanism is in its home position.
SC2	Grip release HP sensor	PI (5mm)	Detects that the grip roller is in its home position.
SC3	Side-positioning IP sensor	PI (19mm)	Detects that an IP being conveyed is present.
SC4	Cleaning guide HP sensor	PI (5mm)	Detects that the cleaning guide is in its home position.
BCRC1	Barcode reader		Scans the barcode of an IP of single-surface type.

● Subscanning unit

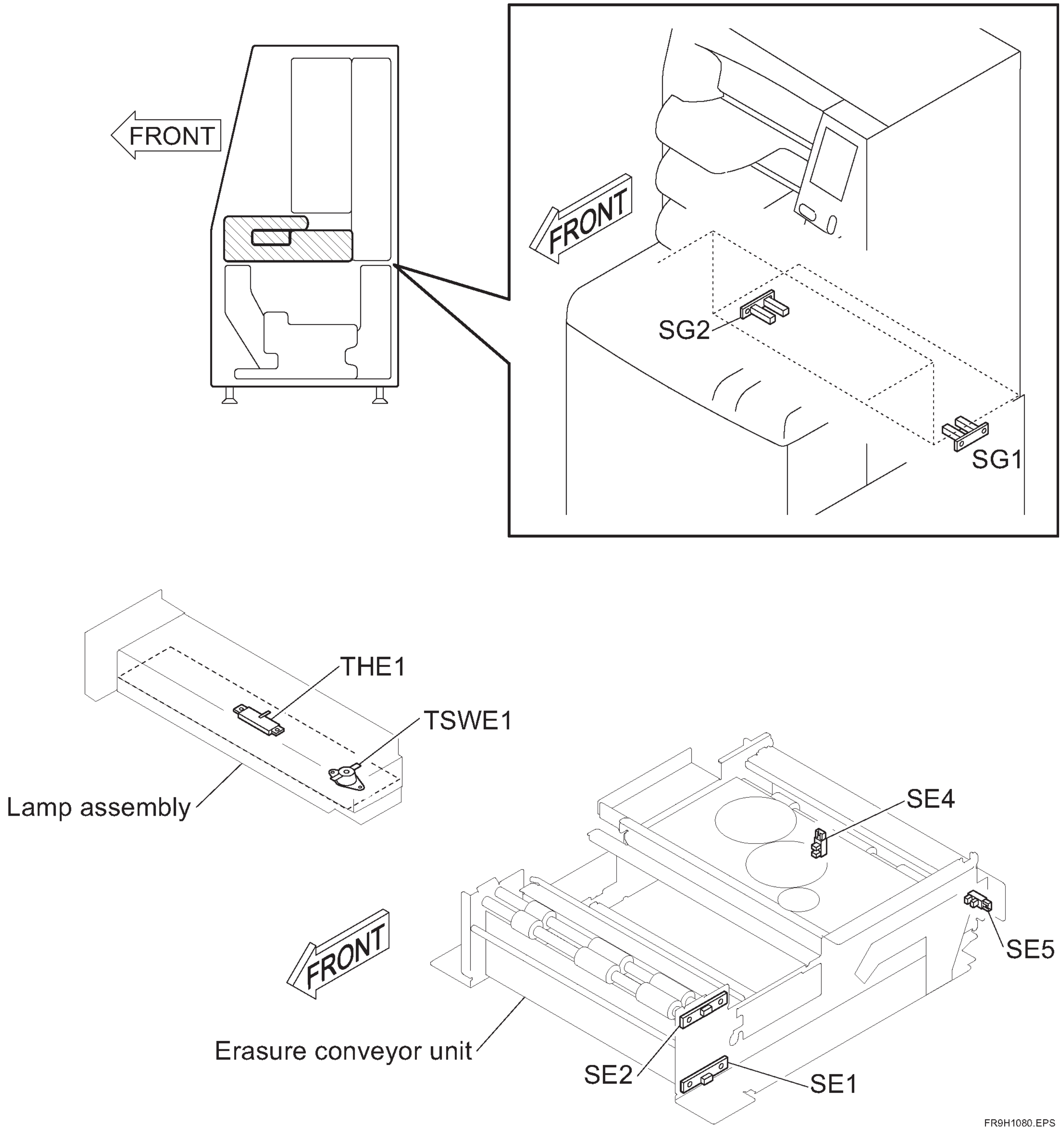
Symbol	Name	Type	Function
SZ1	IP leading-edge sensor	Laser light-receiving element	Detects the leading edge of the IP when it is read.
SZ2	Driving-side grip release HP sensor	PI (5mm)	Detects the driving-side grip state.
SZ3	Driven-side grip release HP sensor	PI (5mm)	Detects the driven-side grip state.
SZ4	Dust-removal HP sensor	PI (5mm)	Detects that the antistatic member is in its home position.
SZ5	IP stopper HP sensor	PI (5mm)	Detects that the IP stopper is in its home position.

● Post-reading conveyor unit

Symbol	Name	Type	Function
SD1	Grip release HP sensor	PI (5mm)	Detects that the grip roller is in its home position.
SD2	Post-reading conveyance IP sensor	PI (19mm)	Detects that an IP being conveyed is present.

I/O Locations: Erasure Conveyor Unit and Housing

Locations of the sensors and thermistor are illustrated below.



A list of sensor and thermistor names and function is presented below.

Erasure conveyor unit

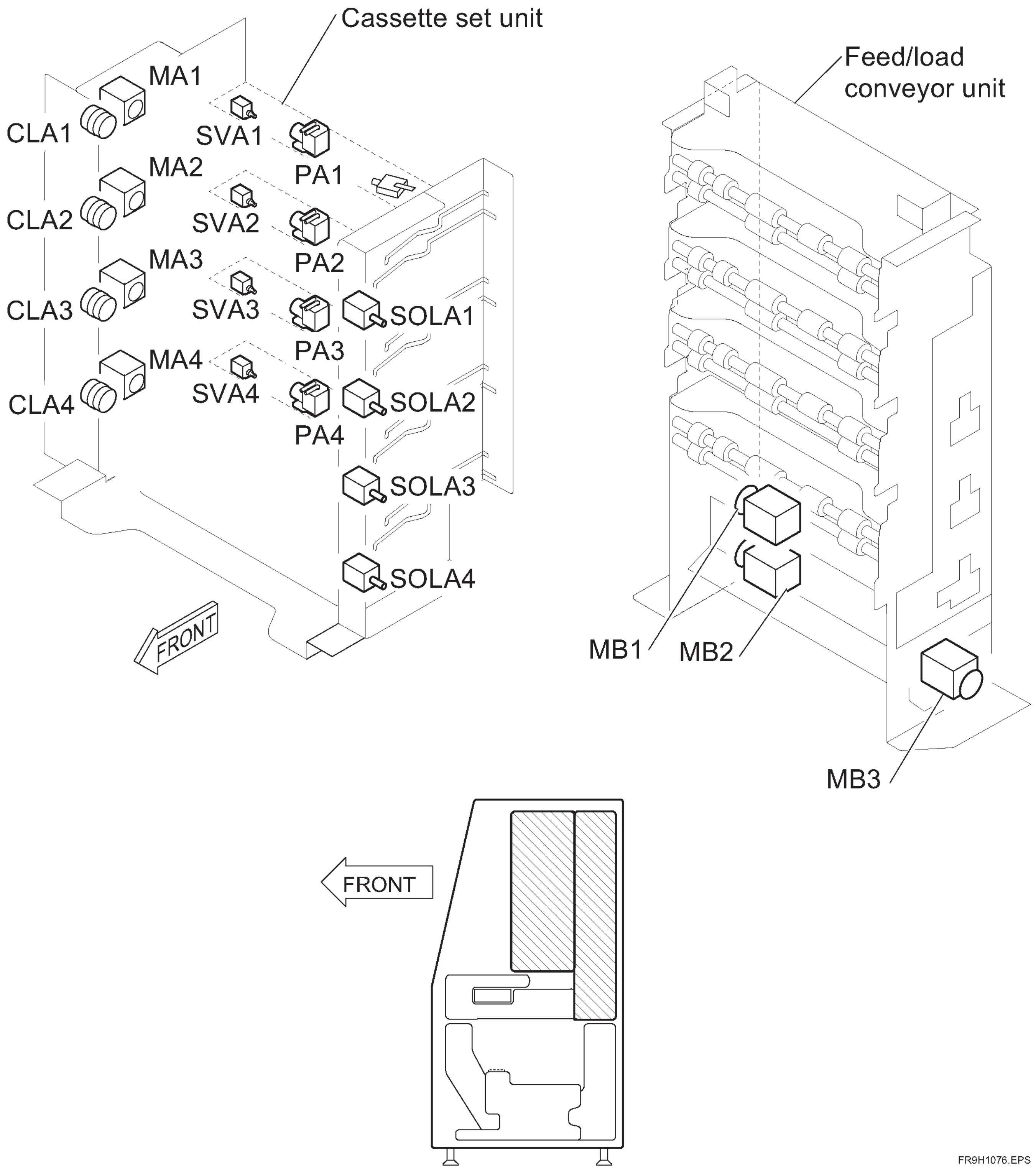
Symbol	Name	Type	Function
SE1	Post-reading conveyance standby IP sensor	PI (19mm)	Detects that an IP being conveyed is present.
SE2	Switchback standby IP sensor	PI (19mm)	Detects that an IP being conveyed is present.
SE4	Erasure side-positioning mechanism HP sensor	PI (5mm)	Detects that the side-positioning mechanism is in its home position.
SE5	Grip release HP sensor	PI (5mm)	Detects that the grip roller is in its home position.
TSWE1	Safety thermostat sensor	Thermal switch	Detects the temperature at the reflection plate of the erasure unit.
THE1	Lamp temperature detection thermistor	Thermistor	Detects the temperature within the erasure lamp assembly.

Housing

Symbol	Name	Type	Function
SG1	Side-positioning entrance IP sensor	PI (19mm)	IP conveyance sensor
SG2	“11x14 IP” determination sensor	PI (19mm)	IP conveyance sensor

■ I/O Locations: Cassette Set Unit and Feed/Load Conveyor Unit

Locations of the motors, clutches, solenoids, pumps, and solenoid valves are illustrated below.


Cassette set unit
MA1
CLA1
SVA1
PA1
MA2
CLA2
SVA2
PA2
MA3
CLA3
SVA3
PA3
SOLA1
MA4
CLA4
SVA4
PA4
SOLA2
SOLA3
SOLA4
FRONT
Feed/load conveyor unit
MB1
MB2
MB3
FRONT
FR9H1076.EPS

A list of motor, clutch, solenoid, pump, and solenoid valve names and functions is presented below.

● Cassette set unit

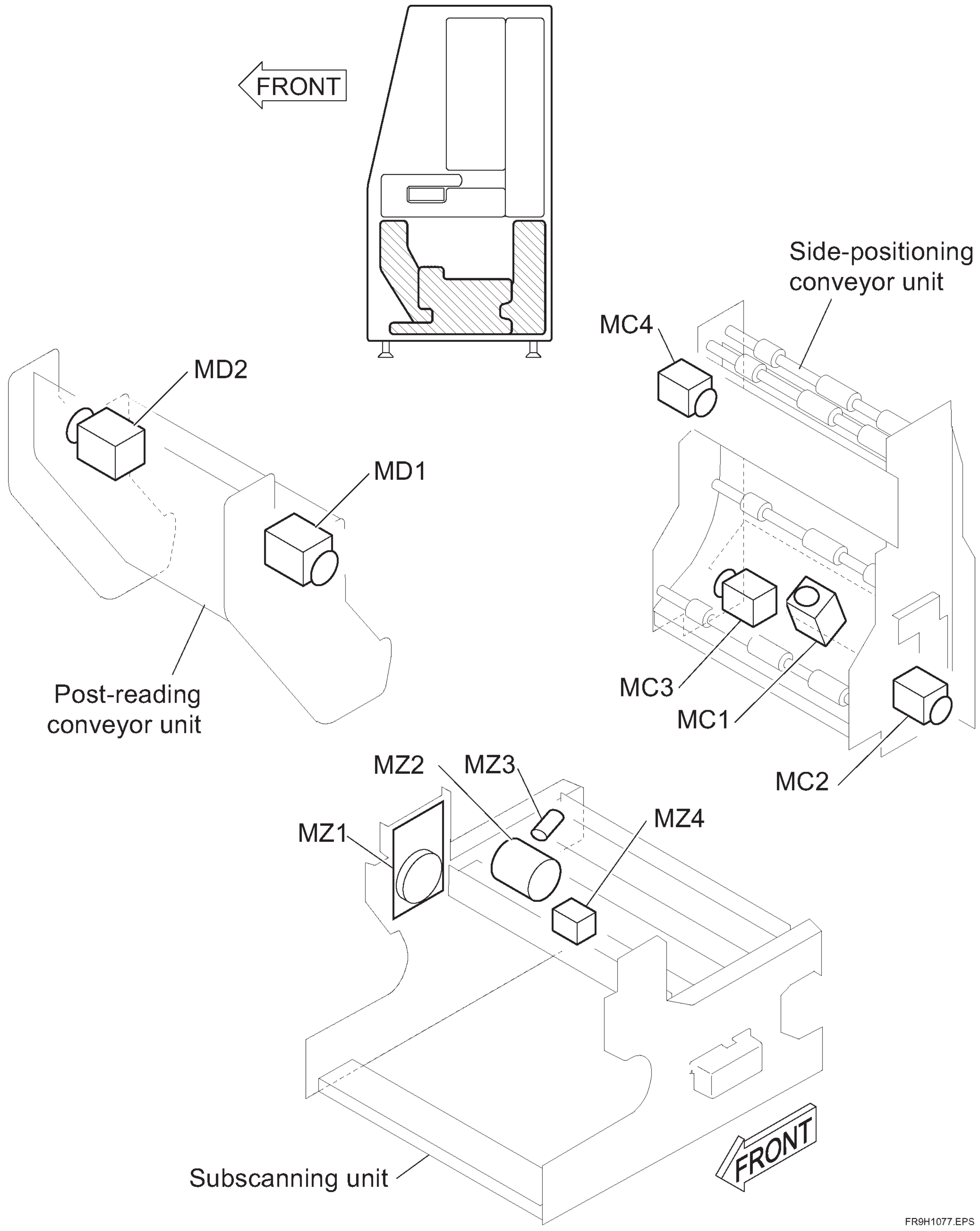
Symbol	Name	Type	Function
SOLA1, 2, 3, 4	Cassette hold solenoid	Power-down solenoid	Holds and releases the cassette hold pin.
MA1, 2, 3, 4	Suction cup driving motor	Pulse motor	Drives the suction cup arm and ejects a cassette when the clutch is turned ON.
PA1, 2, 3, 4	IP suction pump	Pump	Sucks when turned ON.
SVA1, 2, 3, 4	IP leak valve	Solenoid valve	Leaks when turned ON.
CLA1, 2, 3, 4	Cassette ejection clutch	Clutch	Transfers the motive power of the suction cup driving motor to the rollers during cassette ejection.

● Feed/load conveyor unit

Symbol	Name	Type	Function
MB1	IP transport motor	Pulse motor	Transports an IP.
MB2	IP transport motor	Pulse motor	Transports an IP.
MB3	Convergence path changeover guide driving motor	Pulse motor	Changes the conveyance path.

I/O Locations: Side-Positioning Conveyor Unit, Subscanning Unit, and Post-Reading Conveyor Unit

Locations of the motors are illustrated below.


FRONT
MD2
MD1
Post-reading conveyor unit
MC4
Side-positioning conveyor unit
MC3
MC1
MC2
MZ2
MZ3
MZ1
MZ4
Subscanning unit
FRONT
FR9H1077.EPS

A list of motor names and functions is presented below.

- **Side-positioning conveyor unit**

Symbol	Name	Type	Function
MC1	Side-positioning motor	Pulse motor	Drives the side-positioning mechanism
MC2	Grip release motor	Pulse motor	Grips and releases the grip roller.
MC3	IP transport motor	Pulse motor	Transports an IP.
MC4	Cleaning guide driving motor	Pulse motor	Drives the cleaning guide.

- **Subscanning unit**

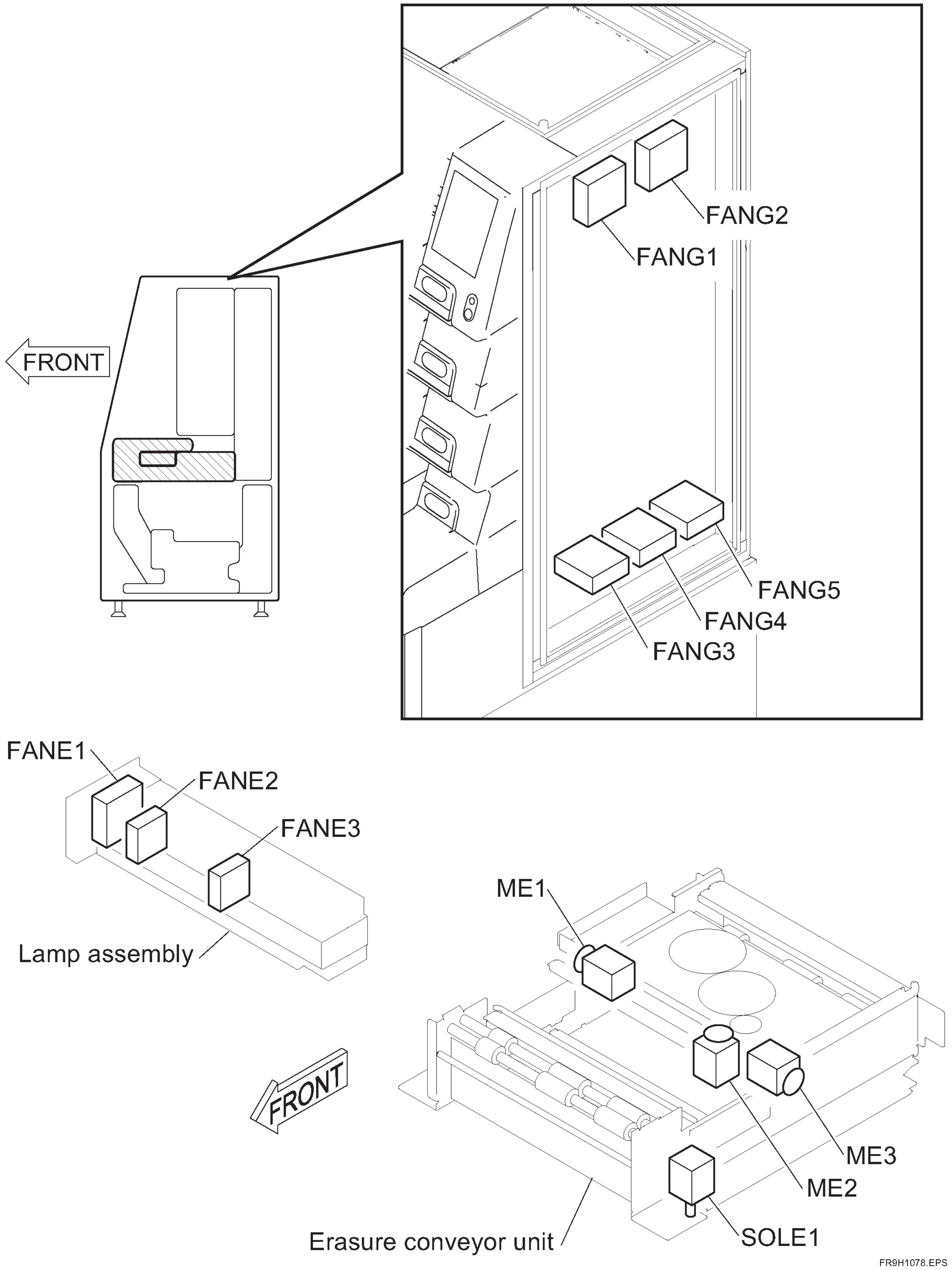
Symbol	Name	Type	Function
MZ1	Subscanning motor	FFM	Transports an IP.
MZ2	Grip driving motor	DC motor	Grips and releases the driving and driven shafts.
MZ3	Dust removal motor	DC motor	Removes dust deposited on the light-collecting guide and mirror.
MZ4	IP stopper driving motor	Pulse motor	Drives the IP stopper.

- **Post-reading conveyor unit**

Symbol	Name	Type	Function
MD1	Grip release motor	Pulse motor	Grips and releases the grip roller.
MD2	IP transport motor	Pulse motor	Transports an IP.

■ I/O Locations: Erasure Conveyor Unit and Housing

Locations of the motors, solenoids, and fans are illustrated below.


FRONT
FANG2
FANG1
FANG5
FANG4
FANG3
FANE1
FANE2
FANE3
Lamp assembly
ME1
FRONT
ME3
ME2
Erasure conveyor unit
SOLE1
FR9H1078.EPS

A list of motor, solenoid, and fan names and functions is presented below.

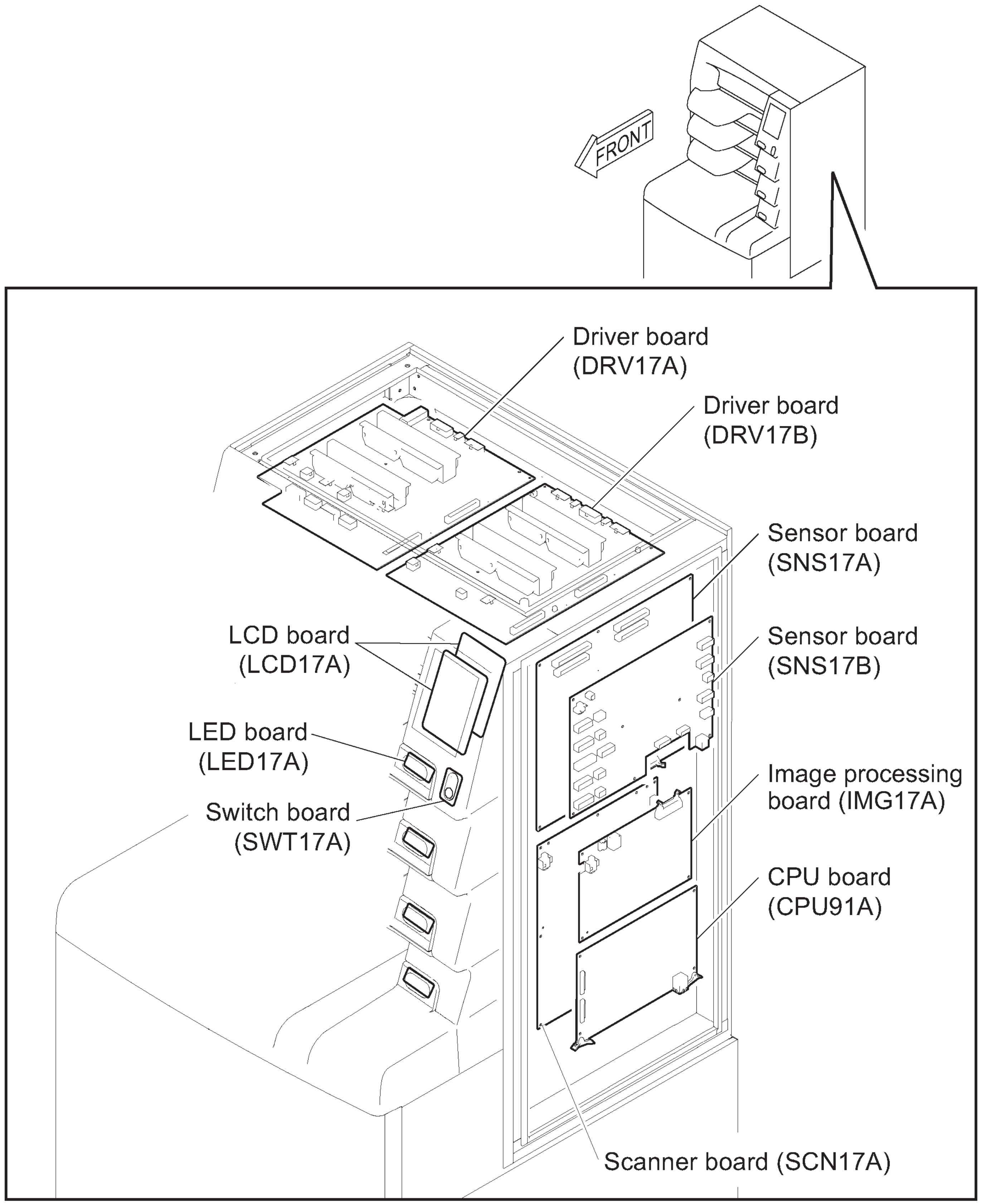
● Erasure conveyor unit

Symbol	Name	Type	Function
ME1	IP transport motor	Pulse motor	Transports an IP.
ME2	Side-positioning motor	Pulse motor	Drives the side-positioning mechanism.
ME3	Grip release motor	Pulse motor	Grips and releases the grip roller.
SOLE1	Branch path changeover guide driving solenoid	Power-down solenoid	Effects path changeover.
FANE1	Erasure unit cooling fan	DC fan	Cools the erasure unit.
FANE2	Inverter cooling fan	DC fan	Cools the inverter board.
FANE3	Inverter cooling fan	DC fan	Cools the inverter board.

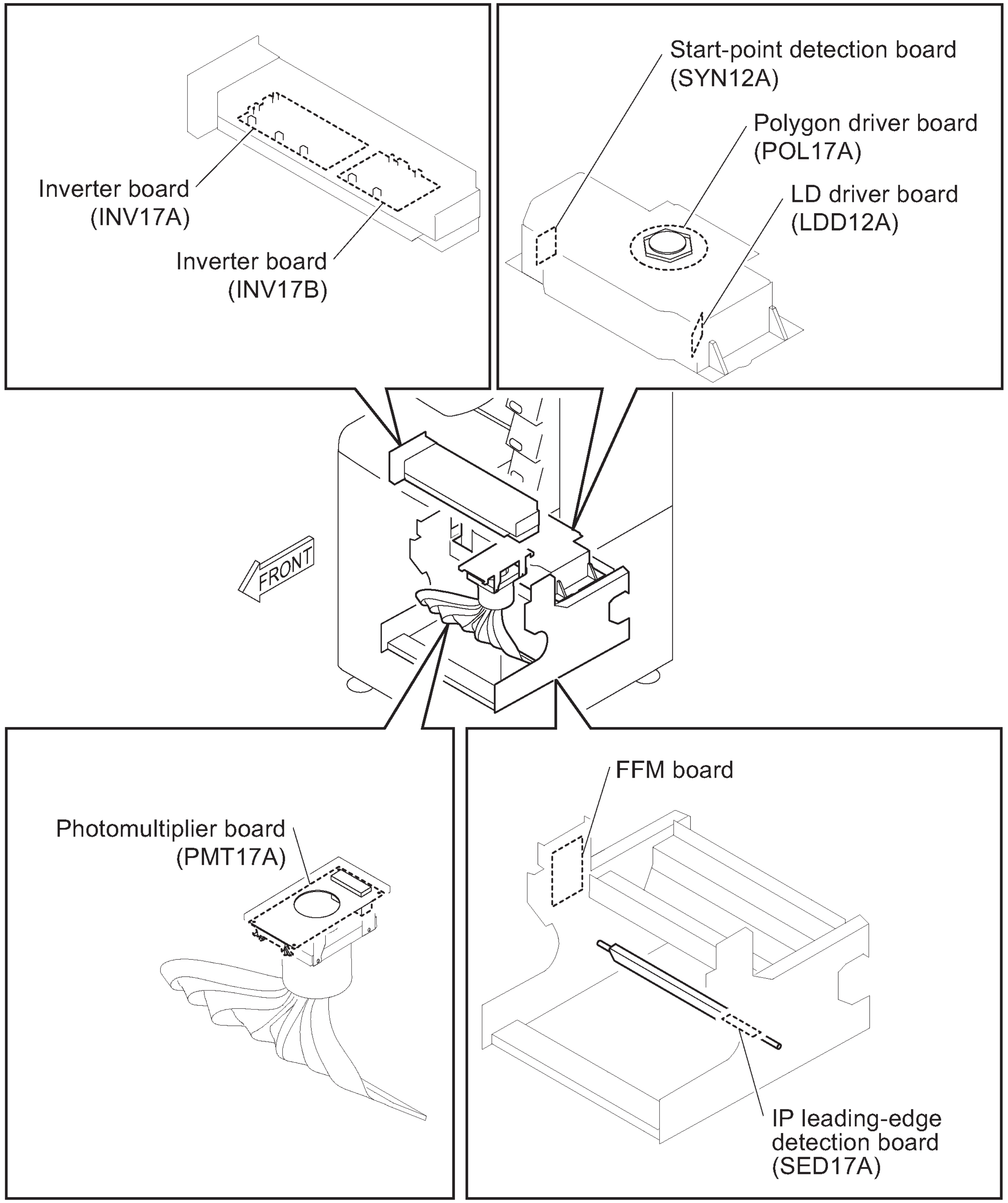
● Housing

Symbol	Name	Type	Function
FANG1, 2, 3, 4, 5	Board cooling fan	DC fan	Cools the boards within the housing.

1.4.4 Board Locations


FRONT
Driver board (DRV17A)
Driver board (DRV17B)
Sensor board (SNS17A)
Sensor board (SNS17B)
LCD board (LCD17A)
LED board (LED17A)
Switch board (SWT17A)
Image processing board (IMG17A)
CPU board (CPU91A)
Scanner board (SCN17A)

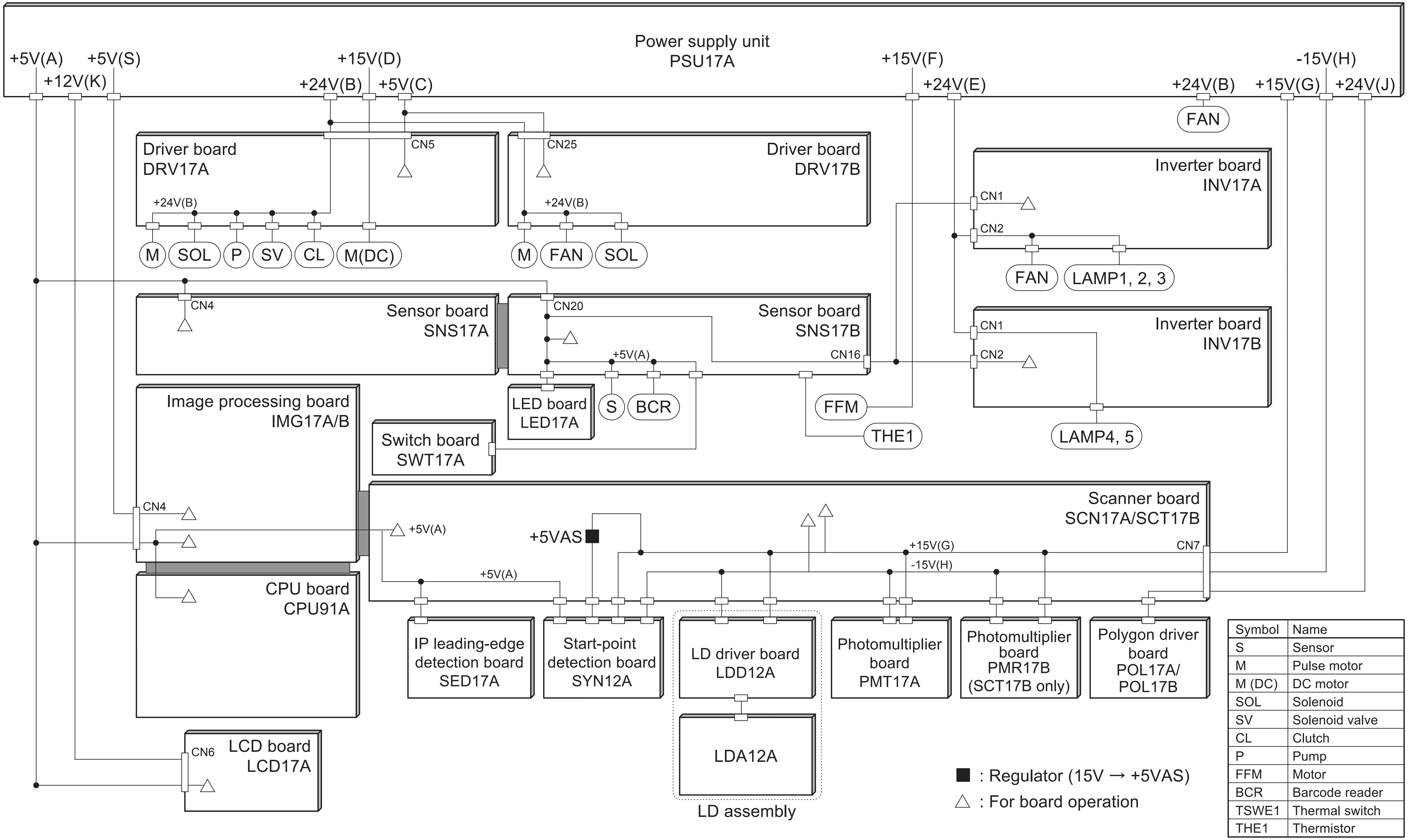
FR9H1070.EPS


Inverter board (INV17A)
Inverter board (INV17B)
Start-point detection board (SYN12A)
Polygon driver board (POL17A)
LD driver board (LDD12A)
FRONT
Photomultiplier board (PMT17A)
FFM board
IP leading-edge detection board (SED17A)

FR9H1071.EPS

1.5 System Block Diagram

■ Power Supply System (#20001 or Later)


Power supply unit
PSU17A
+5V(A)
+12V(K)
+5V(S)
+24V(B)
+15V(D)
+5V(C)
+15V(F)
+24V(E)
+24V(B)
-15V(H)
+15V(G)
+24V(J)
FAN
Driver board
DRV17A
CN5
+24V(B)
M
SOL
P
SV
CL
M(DC)
CN25
Driver board
DRV17B
+24V(B)
M
FAN
SOL
Inverter board
INV17A
CN1
CN2
FAN
LAMP1, 2, 3
CN4
Sensor board
SNS17A
CN20
Sensor board
SNS17B
+5V(A)
CN16
Inverter board
INV17B
CN1
CN2
Image processing board
IMG17A/B
LED board
LED17A
S
BCR
FFM
THE1
LAMP4, 5
Switch board
SWT17A
Scanner board
SCN17A/SCT17B
CN4
+5V(A)
+5VAS
+15V(G)
-15V(H)
CN7
+5V(A)
CPU board
CPU91A
IP leading-edge detection board
SED17A
Start-point detection board
SYN12A
LD driver board
LDD12A
LDA12A
LD assembly
Photomultiplier board
PMT17A
Photomultiplier board
PMR17B
(SCT17B only)
Polygon driver board
POL17A/
POL17B
CN6
LCD board
LCD17A

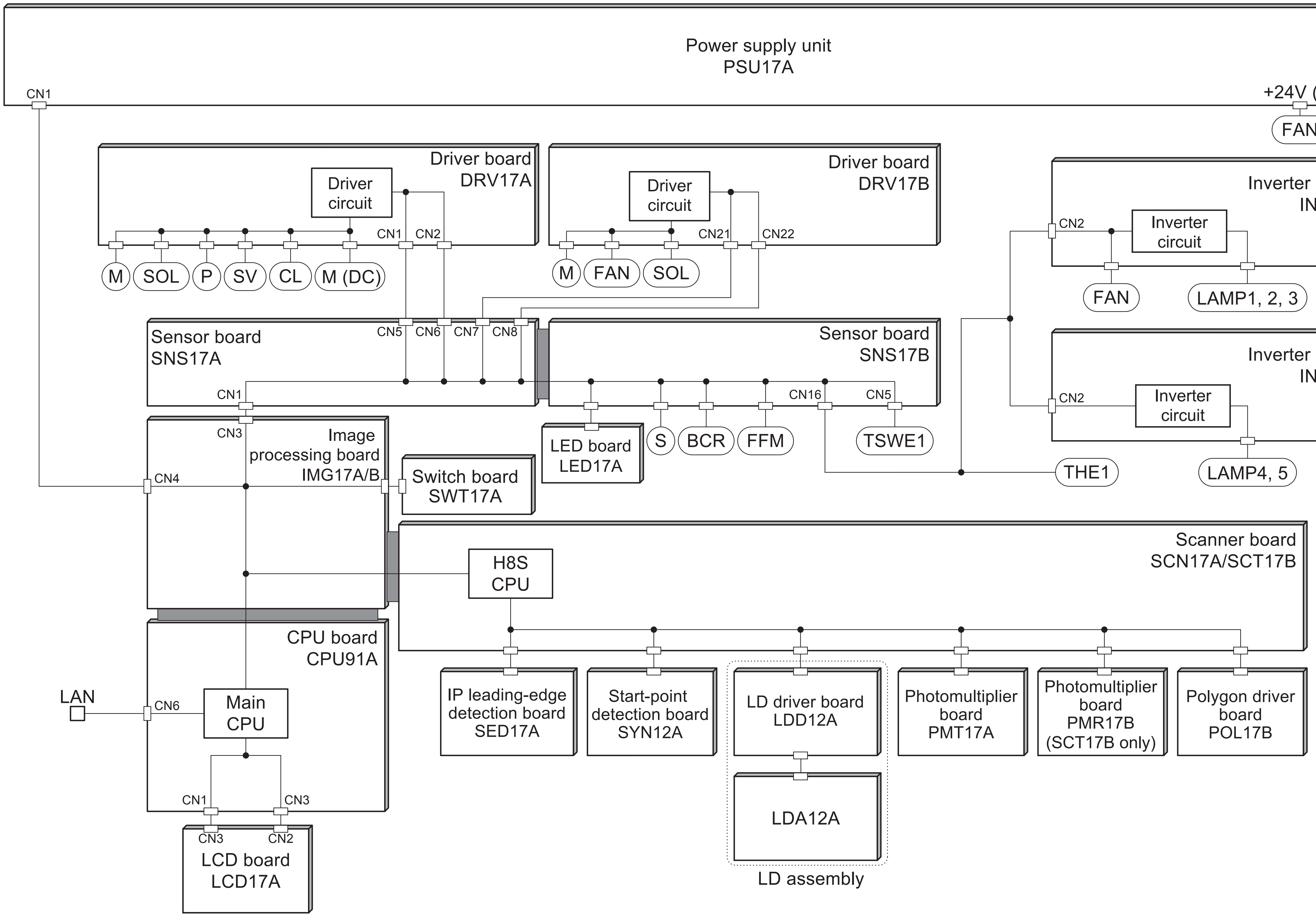
■ : Regulator (15V → +5VAS)

△ : For board operation

Symbol	Name
S	Sensor
M	Pulse motor
M (DC)	DC motor
SOL	Solenoid
SV	Solenoid valve
CL	Clutch
P	Pump
FFM	Motor
BCR	Barcode reader
TSWE1	Thermal switch
THE1	Thermistor

FR9H1103.EPS

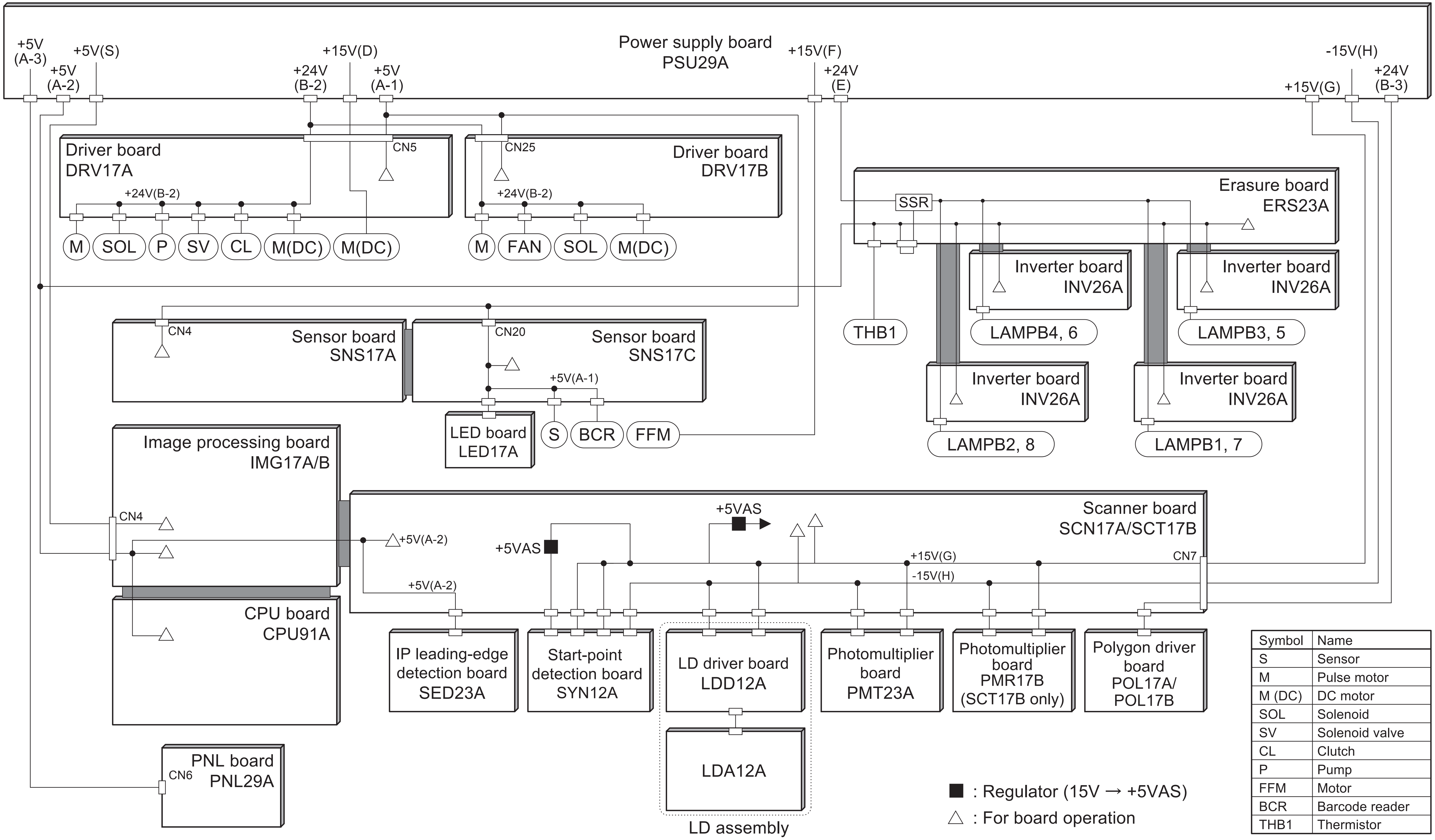
■ Signal System (#20001 or Later)


Power supply unit
PSU17A
CN1
+24V (B)
FAN
Driver board
DRV17A
Driver circuit
CN1
CN2
M
SOL
P
SV
CL
M (DC)
Driver board
DRV17B
Driver circuit
CN21
CN22
M
FAN
SOL
Inverter board
INV17A
CN2
Inverter circuit
FAN
LAMP1, 2, 3
Sensor board
SNS17A
CN5
CN6
CN7
CN8
CN1
Sensor board
SNS17B
CN16
CN5
Inverter board
INV17B
CN2
Inverter circuit
CN3
Image processing board
IMG17A/B
CN4
LED board
LED17A
S
BCR
FFM
TSWE1
THE1
LAMP4, 5
Switch board
SWT17A
Scanner board
SCN17A/SCT17B
H8S
CPU
CPU board
CPU91A
LAN
CN6
Main CPU
CN1
CN3
CN3
CN2
LCD board
LCD17A
IP leading-edge detection board
SED17A
Start-point detection board
SYN12A
LD driver board
LDD12A
LDA12A
LD assembly
Photomultiplier board
PMT17A
Photomultiplier board
PMR17B
(SCT17B only)
Polygon driver board
POL17B

Symbol	Name
S	Sensor
M	Pulse motor
M (DC)	DC motor
SOL	Solenoid
SV	Solenoid valve
CL	Clutch
P	Pump
FFM	Motor
BCR	Barcode reader
TSWE1	Thermal switch
THE1	Thermistor

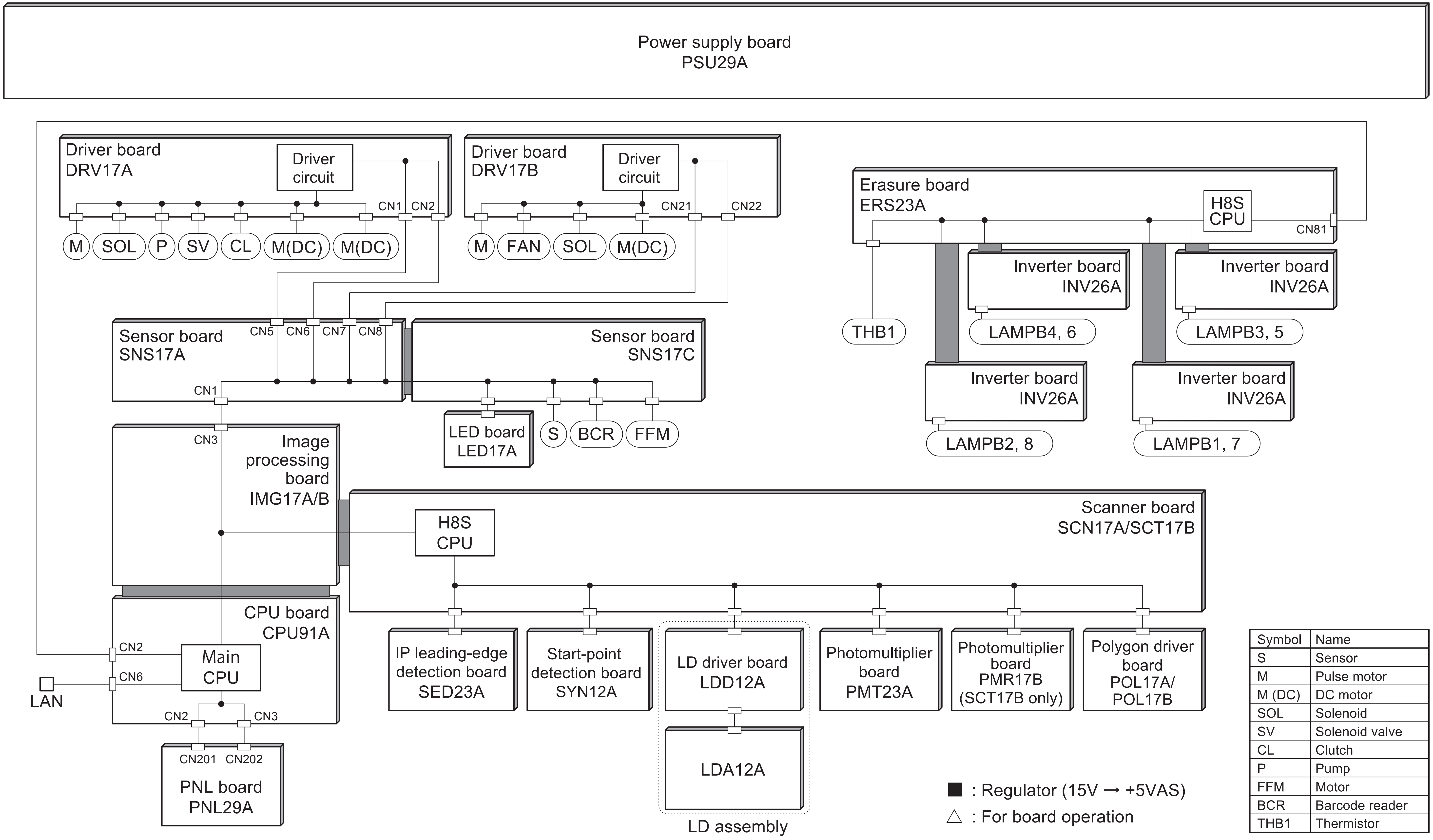
FR9H1104.EPS

■ Power Supply System (#50001 or Later)


Power supply board
PSU29A
+5V (A-3)
+5V(S)
+5V (A-2)
+15V(D)
+24V (B-2)
+5V (A-1)
+15V(F)
+24V (E)
-15V(H)
+15V(G)
+24V (B-3)
Driver board
DRV17A
CN5
+24V(B-2)
M
SOL
P
SV
CL
M(DC)
M(DC)
Driver board
DRV17B
CN25
+24V(B-2)
M
FAN
SOL
M(DC)
Erasure board
ERS23A
SSR
THB1
Inverter board
INV26A
LAMPB4, 6
Inverter board
INV26A
LAMPB3, 5
Inverter board
INV26A
LAMPB2, 8
Inverter board
INV26A
LAMPB1, 7
CN4
Sensor board
SNS17A
CN20
Sensor board
SNS17C
+5V(A-1)
LED board
LED17A
S
BCR
FFM
Image processing board
IMG17A/B
CN4
+5V(A-2)
CPU board
CPU91A
PNL board
PNL29A
CN6
Scanner board
SCN17A/SCT17B
+5VAS
+5VAS
+15V(G)
-15V(H)
CN7
+5V(A-2)
IP leading-edge detection board
SED23A
Start-point detection board
SYN12A
LD driver board
LDD12A
LDA12A
LD assembly
Photomultiplier board
PMT23A
Photomultiplier board
PMR17B
(SCT17B only)
Polygon driver board
POL17A/
POL17B
■ : Regulator (15V → +5VAS)
△ : For board operation
FR9H1107.ai

Symbol	Name
S	Sensor
M	Pulse motor
M (DC)	DC motor
SOL	Solenoid
SV	Solenoid valve
CL	Clutch
P	Pump
FFM	Motor
BCR	Barcode reader
THB1	Thermistor

■ Signal System (#50001 or Later)


Power supply board
PSU29A
Driver board
DRV17A
Driver circuit
CN1
CN2
M
SOL
P
SV
CL
M(DC)
M(DC)
Driver board
DRV17B
Driver circuit
CN21
CN22
M
FAN
SOL
M(DC)
Erasure board
ERS23A
H8S CPU
CN81
Inverter board
INV26A
Inverter board
INV26A
THB1
LAMPB4, 6
LAMPB3, 5
Inverter board
INV26A
Inverter board
INV26A
LAMPB2, 8
LAMPB1, 7
Sensor board
SNS17A
CN5
CN6
CN7
CN8
CN1
Sensor board
SNS17C
LED board
LED17A
S
BCR
FFM
CN3
Image processing board
IMG17A/B
Scanner board
SCN17A/SCT17B
H8S
CPU
CPU board
CPU91A
CN2
CN6
Main CPU
LAN
CN2
CN3
CN201
CN202
PNL board
PNL29A
IP leading-edge detection board
SED23A
Start-point detection board
SYN12A
LD driver board
LDD12A
LDA12A
LD assembly
Photomultiplier board
PMT23A
Photomultiplier board
PMR17B
(SCT17B only)
Polygon driver board
POL17A/
POL17B
FR9H1108.ai

■ : Regulator (15V → +5VAS)

△ : For board operation

Symbol	Name
S	Sensor
M	Pulse motor
M (DC)	DC motor
SOL	Solenoid
SV	Solenoid valve
CL	Clutch
P	Pump
FFM	Motor
BCR	Barcode reader
THB1	Thermistor

CR-IR 362 Service Manual

Troubleshooting (MT)

Control Sheet

Issue date	Revision number	Reason	Pages affected
08.25.2003	01	Corrections (FM4098)	All pages
10.10.2003	02	Corrections (FM4160)	2-5, 8, 14, 16, 25, 27-30, 33-38, 44-46, 50-53, 58, 59, 59.1, 59.2, 60-73, 75, 76, 78, 79, 81-83, 85, 86, 88-113, 113.1, 113.2, 114-118, 120-122, 124-133, 135, 136, 138-142, 145, 148, 151, 154, 157, 160, 163, 166, 169, 172, 174.1-174.4, 175-190, 190.1, 190.2, 191-197, 199, 201-204, 206-209, 209.1, 209.2, 211, 212, 214-216, 218, 234, 240-257
11.15.2004	04	Corrections (FM4425)	2, 11, 13, 14, 16-18, 20, 22-39, 41, 42, 45, 46, 51-53, 59-309, Appx MT-1-12
05.09.2005	05	Corrections (FM4610)	11, 44, 48–50, 76
02.19.2007	07	Change of document number (FM5097)	All pages
09.30.2008	08	Revision (FM5340)	25, 28-32, 34, 37, 47, 55, 131, 254-310, Appx MT-12-20
09.30.2009	09E	Revision (FM5539)	263

2. Error Code Table

Error Code	Error Name	Occurrence Condition	Analysis Flow
10001	File open error (1)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**
10002	File read error (1)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**
10003	File format error (1)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**
10004	File write error (1)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**
10005	File close error (1)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**
10010	File open error (2)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**
10011	File read error (2)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**
10012	File format error (2)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**
10013	File write error (2)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ **{MT:18.}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
10014	File close error (2)	During bootup, when the file is loaded from the FLASH ROM on the IMG17A/IMG17B board into the SD RAM, error is detected for the file residing in the FLASH ROM. Alternatively, an error is detected for the file residing in the SD RAM.	☞ {MT:18.}
10060	Device open error	When an attempt is made to operate a motor or the like during bootup or routine processing, the specified device cannot be opened.	☞ {MT:18.}
10061	Barcode reader communication error	During bootup or during routine processing, communication error occurs between the CPU91A board and barcode reader (BCR), so that communication cannot be established.	☞ {MT:18.}
10062	Scanner BUSY confirmation timeout	During bootup or during routine processing, the status of the scanner board is checked before sending a command from the CPU91A board to the scanner board (SCN17A/SCT17B), but it is in BUSY state.	☞ {MT:18.}
10063	Scanner command timeout	During bootup and routine processing, a timeout occurs for communication between the main CPU (CPU91A board) and scanner H8CPU (SCN17A/SCT17B board).	☞ {MT:18.}
10064	"CPU-SCN" command retry over	During bootup or during routine processing, a command is sent from the CPU91A board to the SCN17A/SCT17B board, but a retry-over occurs.(Retry; three times)	☞ {MT:4.43}
10065	Image processing CPU error during operation	During routine processing, because the data sent from the "IMG17A/B board: sub-CPU" has an insufficient or excess number of pixels, the software performs processing to supplement or cut the insufficient or excess number of pixels in the line direction.	☞ {MT:18.}
10066	IMG board type error	During bootup, an invalid IMG board is detected. (IMG17A board is installed in CR-IR363.) <Action> Check the IMG board. Mount the IMG17B board if a different board has been mounted.	-
10067	Image processing CPU type error	An out-of-definition version is detected in the image processing CPU of the IMG17A/IMG17B board during bootup.	-
10070	Socket error	Various types of error occur for the socket communication which is used to establish a network connection between the RU and CL	☞ {MT:14.}
10090	FLASH-ROM access error	During bootup or during Maintenance Utility, the FLASH ROM on the IMG17A/IMA17B board is accessed, but error is detected.	☞ {MT:18.}

Error Code	Error Name	Occurrence Condition	Analysis Flow
10100	Image processing initialization error	During bootup or during routine processing, when an attempt is made to initialize the image processing section of the IMG board, 12101 error is detected. Because it is detected three or more times, fatal error results.	☞ {MT:18.}
10120	Image processing CPU sequence error	During IP read processing, an attempt is made to activate the sub-CPU (image processing section) of the IMG board, but 12101 error is detected three times or more, so that fatal error results.	☞ {MT:18.}
10230	Scanner functional error	During bootup or during routine processing, because the connector (CN1 on the PMT17A/PMR17B board, CNZ31 on the scanning optics unit, CNZ32 on the scanning optics unit, CN1 on the SYN12A board, CN1 on the LDD17B board) is disconnected, the laser (LDD), start-point detection (SYN), and photomultiplier (PMT/PMR) functions are disabled. Because the laser is not enabled, the leading-edge detection (SED) cannot be performed (detail code: D0E503). Note that if the HV is OFF, the detail code is D0E403.	☞ {MT:5.1}
10231	Scanner power supply error (1)	During bootup or during routine processing, because +15V is not supplied to the SCN17A/SCT17B board due to blow of the fuse (G011 on the SCNS17A/CT17B board) or +15V power supply error, most of the functions, except for the polygonal mirror (POL) and laser (LDD), are disabled (detail code: A00300). Note that if the HV is OFF, the detail code is A00000.	☞ {MT:5.2}
10232	Scanner power supply error (2)	During bootup or during routine processing, because the fuse (G011 and G041 on the SCN17A/SCT17B board) is blown, the photomultiplier (PMT/PMR) and start-point detection (SYN) functions are disabled (detail code: 809500). Note that if the HV is OFF, the detail code is 808400.	☞ {MT:5.3}
10233	Scanner power supply error (3)	During bootup or during routine processing, because the fuse (H011 on the SCN17A/SCT17B board) is blown or because -15V is not supplied to the SCN17A/SCT17B board, the photomultiplier (PMT/PMR), start-point detection (SYN), and laser (LDD) functions are disabled. Because the laser (LDD) is not enabled, the leading-edge detection (SED) cannot be performed (detail code: A00300).	☞ {MT:5.4}

Error Code	Error Name	Occurrence Condition	Analysis Flow
10234	Scanner power supply error (4)	- During bootup or during routine processing, because the fuse (H011 on the SCN17A/SCT17B board) is blown, ±15V is not supplied to the SCN17A/SCT17B board, and the photomultiplier (PMT/PMR), start-point detection (SYN), laser (LDD), and SCN board (PLL) functions are disabled. Because the laser (LDD) is not enabled, the leading-edge detection (SED) cannot be performed (detail code: A00303). Note that if the HV is OFF, the detail code is A00003. - During bootup, all the fuses except for the fuse (G04 on the SCN17A/SCT17B board) are blown, ±15V is not supplied to the SCN17A/SCT17B board, and the photomultiplier (PMT/PMR), start-point detection (SYN), laser (LDD), and SCN board (PLL) functions are disabled. Because the laser (LDD) is not enabled, the leading-edge detection (SED) cannot be performed (detail code: B00300). Note that if the HV is OFF, the detail code is B00000.	☞ **{MT:5.5}**
10235	Scanner power supply error (5)	- During bootup or during routine processing, because +24V is not supplied to the SCN17A/SCT17B board due to blow of the fuse (J011 on the SCN17A/SCT17B board) or +24V (SLOT-J) power supply error, the polygonal mirror (POL) function is disabled (detail code: 902403). Note that if the HV is OFF, the detail code is 903403. - During bootup or during routine processing, because +5V is not supplied to the SYN12A board and SED17A board due to blow of the fuse (A061 or G021 on the SCN17A/SCT17B board) or +5V (SLOT-A) power supply error, the leading-edge detection (SED) and start-point detection (SYN) functions are disabled (detail code: C01400).	☞ **{MT:5.6}**
10236	Scanner power supply error (6)	During bootup or during routine processing, because ±15V is not supplied to the SYN12A board, PMT17A/PMR17B board, and LDD12A board due to blow of the fuses (G011 and H011 on the SCN17A/SCT17B board), the photomultiplier (PMT/PMR), start-point detection (SYN), and laser (LDD) functions are disabled. Because the laser (LDD) is not enabled, the leading-edge detection (SED) cannot be performed (detail code: 80D500). Note that if the HV is OFF, the detail code is 80D400.	☞ **{MT:5.3}**
10244	Scanner control board error (4)	During bootup, an SCN17A/SCT17B board diagnostic error associated with polygon error is detected. Because the PLL on the SCN17A/SCT17B board does not oscillate, a polygon sync signal cannot be detected.	☞ **{MT:5.8}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
10261	Polygon rotation error (1)	During bootup, error for the polygon lock signal (PONL, POKL) is detected so that the polygonal mirror function is disabled. The start-point detection (SYN) and leading-edge detection (SED) functions are also disabled (detail code: 903403, 003400, 902403).	☞ **{MT:5.8}**
10271	Laser unlit error (1)	During bootup, the laser (LDD) and start-point detection (SYN) functions are disabled due to blow of the fuse (G011 and H011 on the SCN17A/SCT17B board) or laser failure (detail code: 805413, C05413, 00503).	☞ **{MT:5.9}**
10281	Start-point detection error (1)	During routine processing or during self-diagnostics, because the signal from the start-point detection (SYN) is faulty, the SCN17A/SCT17B board does not operate normally (detail code: 801C03).	☞ **{MT:5.10}**
10283	Scanning optics unit board error (1)	For self-diagnostics prior to reading during routine processing, the SCN17A/SCN17BA board diagnostic error associated with polygon error is detected. The laser is unlit due to a disconnected connector at the scanning optics unit, etc., so that an error related to the polygon error occurs, as well.	☞ **{MT:5.8}**
10293	Printed board type error	During bootup, an invalid SCN board type is detected. (SCN17A board is installed in CR-IR363.) <Action> Check the scanner board. Mount the SCT17B board if a different board has been mounted.	-
10294	H8 CPU version error	During bootup, an invalid H8CPU version on the SCN17A/SCT17B is detected.	☞ **{MT:5.15}**
10298	Scanner retry error	During bootup, because the scanner-related error is detected, the IP is returned to the cassette and the scanner is initialized. The routine processing is retried again, but the scanner-related error recurs.	☞ **{MT:5.11}**
10343	IP barcode reading retry error (2)	During routine processing, the IP transport motor (MB2, MC3) is driven for barcode reading retry operation (return conveyance), but the side-positioning entrance IP sensor (SG1) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.1}**
10344	IP barcode reading retry error (1)	During routine processing, the IP transport motor (MC3) is driven for barcode reading retry operation, but the side-positioning IP sensor (SC3) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.1}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
10346	Side-positioning unit IP conveyance error	During routine processing, the IP transport motor (MC3) is driven for IP side-positioning conveyance, but the side-positioning IP sensor (SC3) does not transition to CLOSE within the specified period of time.	☞ {MT:4.1}
10347	Subscanning unit IP leading-edge detection error	During routine processing excluding "secondary erasure," the subscanning motor (MZ1) is driven, but the IP leading-edge sensor (SZ1) does not transition to CLOSE within the specified period of time.	☞ {MT:4.2}
10348	Subscanning unit IP ejection error (1)	During routine processing excluding "secondary erasure," the subscanning motor (MZ1) is driven, but the post-reading conveyance IP sensor (SD2) does not transition to CLOSE within the specified period of time.	☞ {MT:4.2}
10349	Side-positioning unit IP ejection error (2)	During secondary erasure processing, the IP transport motor (MC3, MD2) and subscanning motor (MZ1) are driven to read the IP after IP side-positioning, but the side-positioning IP sensor (SC3) does not transition to OPEN within the specified period of time.	☞ {MT:4.3}
10350	Erasure unit entrance IP sensor status error (1)	During bootup/routine processing, the IP transport motor (MD2, ME1) is driven to convey the IP to the erasure conveyor unit after the IP is read; however, the CLOSE state of the switchback standby IP sensor (SE2) is detected before the post-reading conveyance standby IP sensor (SE1) transitions to CLOSE.	☞ {MT:4.4}
10351	Erasure unit entrance IP sensor status error (2)	During bootup/routine processing, the IP transport motor (MD2, ME1) is driven to convey the IP to the erasure conveyor unit after the IP is read, and the switchback standby IP sensor (SE2) transitions to CLOSE; however, after the MD2, ME1 stops, the post-reading conveyance standby IP sensor (SE1) does not transition to CLOSE, so that the system goes down.	☞ {MT:4.4}
10352	Post-reading conveyor unit IP ejection error (1)	During bootup/routine processing, the IP transport motor (MD2, ME1) is driven to convey the IP to the erasure conveyor unit after the IP is read; however, the post-reading conveyance standby IP sensor (SE1) does not transition to CLOSE within the specified period of time.	☞ {MT:4.4}
10353	Post-reading conveyor unit IP ejection error (2)	During bootup/routine processing, the IP transport motor (MD2, ME1) is driven to convey the IP to the erasure conveyor unit after the IP is read; however, the post-reading conveyance standby IP sensor (SE1) does not transition to OPEN within the specified period of time.	☞ {MT:4.4}

Error Code	Error Name	Occurrence Condition	Analysis Flow
10354	Switchback unit IP conveyance error (1)	During bootup/routine processing, the branch path changeover guide drive solenoid (SOLE1) and IP transport motor (ME1) are driven for IP switchback operation, but the CLOSE state of the post-reading conveyance standby IP sensor (SE1) is detected.	☞ **{MT:4.5}**
10355	Switchback unit IP conveyance error (2)	During routine processing, the IP transport motor (ME1) is driven for IP switchback operation, but the CLOSE state of the post-reading conveyance standby IP sensor (SE1) is detected before the switchback standby IP sensor (SE2) transitions to OPEN.	☞ **{MT:4.5}**
10356	Switchback unit IP conveyance error (3)	During routine processing, the IP erasure processing conveyance ends by driving the IP conveyance motor (ME1), however, the CLOSE of the switchback standby IP sensor (SE2) is detected, so that the system goes down.	☞ **{MT:4.27}**
10357	into Erasure unit IP transporting retry error	Although the IP transport motor (ME1) operation was retried three times for IP conveyance (erasure conveyor) during routine processing, the switchback standby IP sensor (SE2) was closed because the IP did not pass the sensor within the specified time.	☞ **{MT:4.27}**
10358	Erasure unit IP ejection error	During routine processing, the IP transport motor (ME1) is driven to convey the IP to the feed/load conveyor unit, but the pre-convergence IP sensor (SB6) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.27}**
10359	Post-erasure feed/load unit IP conveyance error (1)	During bootup/routine processing, the IP transport motor (ME1, MB1, MB2) is driven to convey the IP to the cassette after the IP is erased; however, the pre-BCR IP sensor (SB5) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.6}**
10360	Load IP conveyance error (1)	During bootup/routine processing, the IP transport motor (ME1, MB1, MB2) is driven to convey the IP to the cassette after the IP is erased, and the pre-BCR sensor (SB5) transitions to CLOSE; however, the IP feed/load sensor (SB1/2/3/4) for the shelf of interest does not transition to CLOSE within the specified period of time.	☞ **{MT:4.6}**
10361	Post-erasure path guide status error (1)	During bootup/routine processing, the IP transport motor (ME1, MB1, MB2) is driven to eject the IP to the cassette after the IP is erased; however, the IP feed/load sensor (SB1/2/3/4) transitions to CLOSE before the CLOSE state of the pre-BCR IP sensor (SB5) is detected.	☞ **{MT:4.6}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
10362	Post-erasure path guide status error (2)	During bootup/routine processing, the IP transport motor (ME1, MB1, MB2) is driven to convey the IP to the cassette after the IP is erased, and the pre-BCR IP sensor (SB5) transitions to CLOSE; however, the IP feed/load sensor (SB1/2/3/4) for other than the shelf of interest transitions to CLOSE.	☞ {MT:4.6}
10363	Load IP conveyance error (4)	During bootup/routine processing, the IP transport motor (ME1, MB1, MB2) is driven to convey the IP to the feed/load conveyor unit after the IP is erased; however, the pre-BCR IP sensor (SB5) does not transition to OPEN within the specified period of time.	☞ {MT:4.6}
10364	Load IP conveyance error (2)	During bootup/routine processing/abnormality processing, the IP transport motor (MB1, MB2) is driven to convey the IP to the cassette; however, the IP feed/load sensor (SB1/2/3/4) for the shelf of interest does not transition to OPEN within the specified period of time.	☞ {MT:4.6}
10365	Load IP conveyance error (3)	During abnormality processing, the IP transport motor (MB1, MB2, MC3) is driven to eject the IP to the cassette; however, the IP feed/load sensor (SB1/2/3/4) does not transition to OPEN within the specified period of time.	☞ {MT:4.6}
10369	Path guide HP detection error	During bootup/routine processing/M-Utility, the convergence path changeover guide drive motor (MB3) is driven to perform home-positioning of the path changeover guide (feed/load conveyor unit); however, the path changeover shelf sensor (SB7/8/9) and path changeover HP sensor (SB11) do not transition to CLOSE within the specified period of time, resulting in a retry (twice or more).	☞ {MT:4.7}
10371	Path guide changeover detection error	During bootup/routine processing/M-Utility, the convergence path changeover guide drive motor (MB3) is driven to perform path changeover operation (feed/load conveyor unit); however, the path changeover shelf sensor (SB7/8/9) and path changeover HP sensor (SB11) do not transition to CLOSE within the specified period of time.	☞ {MT:4.7}
10372	Convergence path guide HP positioning error	During bootup/routine processing/M-Utility, the convergence path changeover guide drive motor (MB3) is driven to perform path changeover operation (feed/load conveyor unit) after IP erasure; however, the convergence path changeover sensor (SB10) does not transition to CLOSE within the specified period of time.	☞ {MT:4.44}

Error Code	Error Name	Occurrence Condition	Analysis Flow
10374	Side-positioning unit grip HP detection error	During bootup/M-Utility, the grip release motor (MC2) is driven to perform grip home-positioning of the side-positioning conveyor unit; however, the OPEN or CLOSE of the grip release HP sensor (SC2) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ {MT:4.8}
10378	Post-reading conveyor unit grip HP detection error	During bootup/M-Utility, the grip release motor (MD1) is driven to perform grip home-positioning of the post-reading conveyor unit; however, the OPEN or CLOSE of the grip release HP sensor (SD1) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ {MT:4.9}
10382	Erasure unit grip HP detection error	During bootup/M-Utility, the grip release motor (ME3) is driven to perform grip home-positioning of the erasure conveyor unit; however, the OPEN or CLOSE of the grip release HP sensor (SE5) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ {MT:4.10}
10386	Side-positioning unit side-positioning mechanism HP detection error	During bootup/routine processing/M-Utility, the side-positioning motor (MC1) is driven to perform side-positioning mechanism home-positioning of the side-positioning conveyor unit; however, the OPEN or CLOSE of the side-positioning mechanism HP sensor (SC1) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ {MT:4.11}
10390	Erasure unit side-positioning mechanism HP detection error	During bootup/routine processing/M-Utility, the side-positioning motor (ME2) is driven to perform side-positioning mechanism home-positioning of the erasure conveyor unit; however, the OPEN or CLOSE of the side-positioning mechanism HP sensor (SE4) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ {MT:4.33}
10394	Suction cup HP detection error	During bootup/routine processing/M-Utility, the suction cup drive motor (MA1/2/3/4) is driven to perform suction cup home-positioning; however, the OPEN or CLOSE of .the suction cup HP sensor (SA4/10/16/22) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ {MT:4.12}
10398	Cleaning guide HP detection error	During bootup/M-Utility, the cleaning guide drive motor (MC4) is driven to perform home-positioning of the cleaning guide; however, the OPEN or CLOSE of the cleaning guide HP sensor (SC4) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ {MT:4.13}

Error Code	Error Name	Occurrence Condition	Analysis Flow
10403	IP stopper HP detection error	During bootup/M-Utility, the IP stopper drive motor (MZ4) is driven to perform home-positioning of the IP stopper; however, the OPEN or CLOSE of the IP stopper HP sensor (SZ5) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ **{MT:4.14}**
10406	IP stopper protrusion error	During bootup/routine processing/M-Utility, the IP stopper drive motor (MZ4) is stopped to protrude the IP stopper; however, the OPEN or CLOSE of the IP stopper HP sensor (SZ5) is not detected. After two retries are executed, this is not detected, so that the system goes down.	☞ **{MT:4.14}**
10410	Driving-shaft grip release error	During routine processing/M-Utility, the grip drive motor (MZ2) is driven to perform grip release operation for the driving shaft; however, the driving-side grip release HP sensor (SZ2) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.15}**
10411	Driving-shaft grip error	During routine processing/M-Utility except for secondary erasure, the grip drive motor (MZ2) is driven to perform grip operation for the driving shaft; however, the driving-side grip release HP sensor (SZ2) does not transition to OPEN within the specified period of time.	☞ **{MT:4.15}**
10412	Driving-shaft fast grip error	During routine processing/M-Utility, the grip drive motor (MZ2) is driven at high speed to perform grip operation for the driving shaft; however, the driving-side grip release HP sensor (SZ2) does not transition to OPEN within the specified period of time.	☞ **{MT:4.15}**
10413	Driven-shaft grip release error	During routine processing/M-Utility except for secondary erasure, the grip drive motor (MZ2) is driven at high speed to perform grip release operation for the driven shaft; however, the driven-side grip release HP sensor (SZ3) does not transition to OPEN within the specified period of time.	☞ **{MT:4.15}**
10414	Driven-shaft grip error	During routine processing/M-Utility, the grip drive motor (MZ2) is driven to perform grip release operation for the driven shaft; however, the driven-side grip release HP sensor (SZ3) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.15}**
10415	Driven-shaft fast grip release error	During secondary erasure/M-Utility, the grip drive motor (MZ2) is driven at high speed to perform grip release operation for the driven shaft; however, the driven-side grip release HP sensor (SZ3) does not transition to OPEN within the specified period of time.	☞ **{MT:4.15}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
10416	Driving-shaft grip correction error (4)	For the correction processing during bootup/at the end of reading, the grip drive motor (MZ2) is driven to correct the grip speed of the driving shaft for the GR type; however, the driving-side grip release HP sensor (SZ2) does not transition to OPEN within the specified period of time. After three times or more grip speed correction are executed, SZ2 does not transition to OPEN within the specified period of time, so that the system goes down.	☞ {MT:4.15}
10417	Driving-shaft grip correction error (1)	For the correction processing during bootup/at the end of reading, the grip drive motor (MZ2) is driven to correct the grip speed of the driving shaft for the ST type; however, the driving-side grip release HP sensor (SZ2) does not transition to OPEN within the specified period of time. Alternatively, the MZ2 does not transition to the interlocked state, then three times or more grip speed correction are executed, however, SZ2 does not transition to OPEN within the specified period of time, so that the system goes down.	☞ {MT:4.15}
10418	Driving-shaft grip correction error (2)	For the correction processing during bootup/at the end of reading, the grip drive motor (MZ2) is driven to correct the grip speed of the driving shaft for the HR single-side type; however, the driving-side grip release HP sensor (SZ2) does not transition to OPEN within the specified period of time. Alternatively, the MZ2 does not transition to the interlocked state, then three times or more grip speed correction are executed, however, SZ2 does not transition to OPEN within the specified period of time, so that the system goes down.	☞ {MT:4.15}
10419	Driving-shaft grip correction error (3)	For the correction processing during bootup/at the end of reading, the grip drive motor (MZ2) is driven to correct the grip speed of the driving shaft for the HR both-side type; however, the driving-side grip release HP sensor (SZ2) does not transition to OPEN within the specified period of time. Alternatively, the MZ2 does not transition to the interlocked state, then three times or more grip speed correction are executed, however, SZ2 does not transition to OPEN within the specified period of time, so that the system goes down.	☞ {MT:4.15}
10420	IP-initialization IP search error (1)	During bootup, two or more sensors of the IP feed/load sensors (SB1/2/3/4) are CLOSE for the remaining IP search processing, so that the system goes down. Several IPs are detected at the cassette set unit.	☞ {MT:4.16}
10421	IP-initialization IP search error (2)	During bootup, two or more sensors of the path changeover HP sensor (SB11) and path changeover shelf sensor (SB7/8/9) are CLOSE for the remaining IP search processing.	☞ {MT:4.7}

Error Code	Error Name	Occurrence Condition	Analysis Flow
10422	IP-initialization IP search error (3)	During bootup, the pre-convergence IP sensor (SB6) and side-positioning entrance IP sensor (SG1) are CLOSE, and the post-reading conveyance standby IP sensor (SE1) or switchback standby IP sensor (SE2) is CLOSE for the remaining IP search processing. There are three or more IPs in the machine.	☞ {MT:4.16}
10425	IP-initialization IP search error (1)	During bootup, when the presence of the cassette is checked, the IP is detected at the cassette set unit, but no cassette is present at the cassette set unit. Additionally, the hold pin (SOLA1/2/3/4: ON) is not lowered.	☞ {MT:4.16}
10426	Initialization remaining IP ejection error	During bootup, the IP is detected, one by one, at the feed/load conveyor unit, erasure conveyor unit, and side-positioning conveyor unit for the remaining IP search.	☞ {MT:4.16}
10430	Dust removal HP detection error (1) (CCW)	During bootup, the dust removal motor (MZ3) is driven (counterclockwise) to perform home-positioning of the dust removal mechanism; however, the dust removal HP sensor (SZ4) does not transition from CLOSE to OPEN to CLOSE. After the retries (four times) are executed, the transition of SZ4 is not detected, so that the system goes down.	☞ {MT:4.17}
10431	Dust removal HP detection error (2) (CCW)	During bootup, the dust removal motor (MZ3) is driven (counterclockwise) to perform home-positioning of the dust removal mechanism; however, the dust removal HP sensor (SZ4) does not transition to OPEN within the specified period of time.	☞ {MT:4.17}
10432	Dust removal HP detection error (3) (CW)	During bootup, the dust removal motor (MZ3) is driven (clockwise) to perform home-positioning of the dust removal mechanism; however, the dust removal HP sensor (SZ4) does not transition to CLOSE within the specified period of time.	☞ {MT:4.17}
10433	Dust removal HP detection error (4) (CW)	During bootup, the dust removal motor (MZ3) is driven (clockwise) to perform home-positioning of the dust removal mechanism; however, the dust removal HP sensor (SZ4) does not transition to OPEN within the specified period of time.	☞ {MT:4.17}
10434	Dust removal HP detection error (5) (CW)	During bootup, the dust removal motor (MZ3) is driven (clockwise) to perform home-positioning of the dust removal mechanism; however, the dust removal HP sensor (SZ4) does not transition to CLOSE within the specified period of time.	☞ {MT:4.17}

Error Code	Error Name	Occurrence Condition	Analysis Flow
10435	Dust removal operation error (1)	During M-Utility, the dust removal motor (MZ3) is driven (clockwise) to perform dust removal operation; however, the dust removal HP sensor (SZ4) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.17}**
10436	Dust removal operation error (2)	During M-Utility, the dust removal motor (MZ3) is driven (clockwise) to perform dust removal operation; however, the dust removal HP sensor (SZ4) does not transition to OPEN within the specified period of time.	☞ **{MT:4.17}**
10437	Dust removal operation error (3)	During M-Utility, the dust removal motor (MZ3) is driven (counterclockwise) to perform dust removal operation; however, the dust removal HP sensor (SZ4) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.17}**
10438	Dust removal operation error (4)	During M-Utility, the dust removal motor (MZ3) is driven (counterclockwise) to perform dust removal operation; however, the dust removal HP sensor (SZ4) does not transition to OPEN within the specified period of time.	☞ **{MT:4.17}**
10439	Dust removal operation error (5)	During routine processing, the IP stopper drive motor (MZ4) is driven (clockwise) to perform the system shutdown processing; however, the dust removal HP sensor (SZ4) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.42}**
10440	Initialization convergence path IP conveyance error (1)	During bootup, the IP transport motor (MB1, MB2, MC3) is driven to perform the remaining IP search processing; however, the side-positioning entrance IP sensor (SG1) and pre-convergence IP sensor (SB6) do not transition to OPEN within the specified period of time.	☞ **{MT:4.18}**
10441	Initialization convergence path IP conveyance error (2)	During bootup, the IP transport motor (MB1, MB2, ME1) is driven to perform the remaining IP search processing; however, the side-positioning entrance IP sensor (SG1) does not transition to CLOSE within the specified period of time. Alternatively, the pre-BCR IP sensor (SB5) and pre-convergence IP sensor (SB6) do not transition to OPEN within the specified period of time.	☞ **{MT:4.18}**
10442	Initialization convergence path IP conveyance error (3)	During bootup, the IP transport motor (MB1, MB2, MC3) is driven to perform the remaining IP search processing; however, the side-positioning entrance IP sensor (SG1) and pre-BCR IP sensor (SB5) do not transition to OPEN within the specified period of time. Alternatively, the pre-convergence IP sensor (SB6) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.18}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
10443	Initialization feed path IP conveyance error (1) (UP)	During bootup, the IP transport motor (MB1, MB2) is driven to perform the remaining IP search processing; however, the pre-BCR IP sensor (SB5) does not transition to OPEN within the specified period of time.	☞ **{MT:4.18}**
10444	Initialization feed path IP conveyance error (2) (DOWN)	During bootup, the IP transport motor (MB1, MB2) is driven to perform the remaining IP search processing; however, the pre-BCR IP sensor (SB5) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.18}**
10445	Initialization feed entrance IP conveyance error (1) (DOWN)	During bootup, the IP transport motor (MB1, MB2, MC3) is driven to perform the remaining IP search processing; however, the IP feed/load sensor (SB1/2/3/4) does not transition to OPEN within the specified period of time.	☞ **{MT:4.18}**
10446	Initialization feed entrance IP conveyance error (2) (DOWN)	During bootup, the IP transport motor (MB1, MB2, ME1) is driven to perform the remaining IP search processing; however, the IP feed/load sensor (SB1/2/3/4) does not transition to OPEN within the specified period of time. (When the IP in the feed/load conveyor unit is moved into the side-positioning conveyor unit.)	☞ **{MT:4.18}**
10447	Initialization side-positioning unit IP conveyance error (1) (DOWN)	During bootup, the IP transport motor (MB1, MB2, MC3) is driven in the direction of subscanning conveyance to perform the remaining IP search processing; however, the side-positioning entrance IP sensor (SG1) does not transition to OPEN within the specified period of time.	☞ **{MT:4.18}**
10448	Initialization side-positioning unit IP conveyance error (2) (UP)	During bootup, the IP transport motor (MC3) is driven in the direction of feed/load conveyor unit to perform the remaining IP search processing; however, the side-positioning entrance IP sensor (SG1) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.19}**
10449	Initialization side-positioning unit IP conveyance error (3) (UP)	During bootup, the IP transport motor (MC3) and subscanning motor (MZ1) are driven to perform the remaining IP search processing; however, the side-positioning entrance IP sensor (SG1) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.19}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
10450	Initialization side-positioning unit IP conveyance error (4) (UP)	During bootup, the IP transport motor (MC3) and subscanning motor (MZ1) are driven to perform the remaining IP search processing; however, the side-positioning entrance IP sensor (SG1) does not transition to CLOSE within the specified period of time. (In the case that the IP is detected in the side-positioning unit for the subscanning conveyor unit processing.)	☞ {MT:4.19}
10451	Initialization erasure unit IP ejection error (1)	During bootup, the IP transport motor (MB1, MB2, ME1) is driven to perform the remaining IP search processing; however, the pre-convergence IP sensor (SB6) does not transition to OPEN within the specified period of time.	☞ {MT:4.20}
10452	Initialization erasure unit IP ejection error (2)	During bootup, the IP transport motor (ME1) is driven to perform the remaining IP search processing; however, the pre-convergence IP sensor (SB6) does not transition to CLOSE within the specified period of time.	☞ {MT:4.20}
10453	Initialization erasure unit IP conveyance error	During bootup, the IP transport motor (MD2, ME1) is driven at low speed to perform the remaining IP search processing; however, the post-reading conveyance standby IP sensor (SE1) does not transition to OPEN within the specified period of time.	☞ {MT:4.34}
10454	Initialization post-reading conveyor unit IP ejection error (1) (UP)	During bootup, the IP transport motor (MD2) is driven to perform the remaining IP search processing; however, the post-reading conveyance IP sensor (SD2) does not transition to OPEN within the specified period of time. (In the case that the IP is detected in the post-reading conveyor unit also, during the IP search processing in the subscanning unit.)	☞ {MT:4.35}
10455	Initialization post-reading conveyor unit IP ejection error (2) (UP)	During bootup, the IP transport motor (MD2) and subscanning motor (MZ1) are driven to perform the remaining IP search processing; however, the post-reading conveyance IP sensor (SD2) does not transition to OPEN within the specified period of time.	☞ {MT:4.35}
10456	Initialization post-reading conveyor unit IP ejection error (3) (DOWN)	During bootup, the IP transport motor (MD2) is driven to perform the remaining IP search processing; however, the post-reading conveyance IP sensor (SD2) does not transition to CLOSE within the specified period of time.	☞ {MT:4.35}
10457	Initialization subscanning unit IP ejection error (1)	During bootup, the IP transport motor (MD2) and subscanning motor (MZ1) are driven to perform the remaining IP search processing; however, the post-reading conveyance IP sensor (SD2) does not transition to OPEN within the specified period of time.	☞ {MT:4.35}

Error Code	Error Name	Occurrence Condition	Analysis Flow
10458	Initialization subscanning unit IP ejection error (2)	During bootup, the IP transport motor (MC3) is driven to perform the remaining IP search processing; however, the post-reading conveyance IP sensor (SD2) does not transition to OPEN within the specified period of time.	☞ **{MT:4.35}**
10459	Initialization IP position information error	During bootup, the CMOS information of the machine (IP found) does not coincide with the remaining IP search processing result (IP not found) so that the system goes down by user selection.	☞ **{MT:4.36}**
10460	Initialization IP load conveyance error (1)	During bootup, when an IP is loaded into the cassette, the IP feed/load sensor (SB1/2/3/4) on the shelf of interest does not transition to OPEN within the specified period of time.	☞ **{MT:4.6}**
10461	Initialization IP load conveyance error (2)	During bootup, when an IP is loaded into the cassette from the erasure conveyor unit, the pre-BCR IP sensor (SB5) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.6}**
10462	Initialization IP load conveyance error (3)	During bootup, when an IP is loaded into the cassette from the erasure conveyor unit, the IP feed/load sensor (SB1/2/3/4) does not transition to OPEN within the specified period of time.	☞ **{MT:4.6}**
10463	Forbidden response from Start-Read command CL	Operation is interrupted as the forbidden response is received from the CL while the RU is retrying to read and convey. Processing is interrupted as the forbidden response is received from the CL although the Start-Read command was transmitted from the RU.	-
10694	Back-side H8 CPU version error	During bootup, an invalid H8 CPU version on the SCT17B is detected.	☞ **{MT:18.}**
10700	SDRAM test error	During bootup, the SDRAM, or main memory of the CPU91A board, is tested, and a retry is executed twice, but error is detected.	☞ **{MT:18.}**
10799	CPU bus error	During bootup or during routine processing, a bus error for the main CPU on the CPU91A board is detected.	☞ **{MT:18.}**
11200	Initialization HV-OFF status	During bootup, HV(high voltage) on PMT17A/PMR17B board is OFF.	☞ **{MT:13.}**
11273	Laser life warning	During bootup, the laser drive current value (LDIF) is more than 1.4 times the factory default value.	☞ **{MT:5.15}**
11287	Image data variation or image signal connector error during bootup	An abnormal virtual data change was detected when the virtual data transfer diagnostics was conducted for bootup. In the virtual data transfer diagnostics for bootup, an abnormal virtual data change, disconnected image signal connector, or erroneous connector connection was detected.	☞ **{MT:5.17}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
11320	Cassette setting status error (1)	<User operation> After the cassette is loaded, the cassette is pulled out immediately. <Occurrence condition> During routine processing/M-Utility, the cassette hold solenoid (SOLA1/2/3/4) is turned OFF to hold the cassette, and the cassette hold sensor (SA3/9/15/21) detects the OPEN state; however, the cassette IN sensor (SA2/8/14/20) detects the OPEN state.	☞ **{MT:4.21}**
11321	Cassette setting status error (2)	During routine processing/M-Utility, the cassette hold solenoid (SOLA1/2/3/4) is turned OFF to hold the cassette, and the hold pin protrudes; however, the cassette hold sensor (SA3/9/15/21) does not transition to OPEN. Though the retries (twice or more) are executed, the cassette is not held. (A message is notified.)	☞ **{MT:4.37}**
11322	Cassette setting status error (3)	During bootup/routine processing/M-Utility, the OPEN state of the cassette IN sensor (SA2/8/14/20) is detected for the sensor check processing just before the IP is sucked after cassette loading.	☞ **{MT:4.21}**
11323	Cassette setting status error (4)	During routine processing/M-Utility, the CLOSE state of the cassette hold sensor (SA3/9/15/21) is detected for the sensor check processing just before the IP is sucked after cassette loading.	☞ **{MT:4.37}**
11324	Hold pin release error	During bootup/routine processing/M-Utility, the cassette hold solenoid (SOLA1/2/3/4) is turned ON to release the cassette hold; however, the cassette hold sensor (SA3/9/15/21) does not transition to CLOSE. Though the retries (twice) are executed, the cassette hold is not released. (A message is notified.)	☞ **{MT:4.37}**
11325	Cassette loading inlet disabled	During bootup/routine processing/M-Utility, the user disables the shelf after occurrence of "11324" error.	☞ **{MT:4.37}**
11328	Feed IP suction error (1)	During routine processing/M-Utility/abnormality processing, the IP suction pump (PA1/2/3/4) is driven to convey the IP from the cassette to the feed/load conveyor unit; however, the suction sensor (SA5/11/17/23) does not transition to OPEN within the specified period of time. Though the retries (twice) are executed, the IP is not sucked.	☞ **{MT:4.26}**
11329	Feed IP suction error (2) (drop)	During routine processing/M-Utility/abnormality processing, the IP is sucked to perform suction conveyance of the IP from the cassette to the feed/load conveyor unit; however, the CLOSE state (IP drop) of the suction sensor (SA5/11/17/23) is detected during IP conveyance. Though the retries (twice) for the IP suction are executed, the IP drop is detected again.	☞ **{MT:4.26}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
11330	Feed/load unit entrance IP feed retry	During routine processing/M-Utility/abnormality processing, an attempt is made to convey the IP from the cassette to the feed/load conveyor unit; however, the IP feed/load sensor (SB1/2/3/4) does not transition to CLOSE. Though the retries (twice) for the IP suction are executed, the IP is not transported to the IP feed/load sensor.	☞ **{MT:4.22}**
11332	Feed IP conveyance error (1)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the pre-BCR IP sensor (SB5) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.23}**
11333	Feed IP conveyance error (2)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the side-positioning entrance IP sensor (SG1) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.23}**
11334	Feed IP conveyance error (3)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the pre-BCR IP sensor (SB5) does not transition to OPEN within the specified period of time.	☞ **{MT:4.23}**
11335	Feed IP conveyance error (4)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the side-positioning IP sensor (SC3) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.23}**
11336	Feed IP sensor failure (1) (SB5 failure)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the side-positioning IP sensor (SC3) or side-positioning entrance IP sensor (SG1) transitions to CLOSE before the pre-BCR IP sensor (SB5) transitions to CLOSE.	☞ **{MT:4.23}**
11337	Feed IP sensor failure (2) (SG1 failure)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the side-positioning IP sensor (SC3) transitions to CLOSE before the side-positioning entrance IP sensor (SG1) transitions to CLOSE.	☞ **{MT:4.23}**
11338	Cassette type error	During routine processing/M-Utility, an out-of-spec cassette is loaded into the machine (CR-IR362) equipped with a both-side cassette error detection option.	☞ **{MT:4.24}**
11339	Cassette barcode reading error	<User operation> A cassette that is not compatible with the machine is loaded. <Occurrence condition> During routine processing, the barcode of the cassette can be read, but the data is defective.	☞ **{MT:4.24}**
11340	IP size detection error (1)	During routine processing/M-Utility, the IP transport motor (MB1, MB2), convergence path changeover guide drive motor (MB3), and side-positioning motor (MC1) are driven to determine the IP size; when the IP passage time for the pre-BCR IP sensor (SB5), the detection status of the "11x14 IP" determination sensor (SG2), and the sensor status of the inch/metric sensor (SA6, SA12, SA18, SA24) are checked, the result does not indicate a sensor combination that is used for IP size determination. Nonconformance of the IP size is detected.	☞ **{MT:4.25}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
11341	IP size detection error (2)	During routine processing/M-Utility, the IP size detected by the machine is compared with the IP barcode information; however, error is detected in the barcode information. If the IP is conveyed with the inch/metric sensor (SA6/SA12/SA18/SA24) damaged, the IP is conveyed to the IP bar code reader (BCR1) of the side positioning conveyer unit and thereafter ejected to the cassette.	☞ {MT:4.40}
11343	IP barcode reading error	During routine processing, the barcode cannot be read by the barcode reader (BCRC1) of the side-positioning conveyor unit. Though the retries (twice) for reading the barcode are executed, it also cannot read, so that a barcode data message which is inputted manually by user is displayed.	☞ {MT:4.28}
11345	IP type error	During routine processing/M-Utility, the barcode information of the IP and the IP type that is set in CONFIG are compared; however, the barcode information of an IP type other than the CONFIG setting is detected.	-
11366	Load IP suction error (1)	During bootup/routine processing/M-Utility/abnormality processing, the IP suction pump (PA1/2/3/4) is driven to load the IP to the cassette; however, the suction sensor (SA5/11/17/23) does not transition to OPEN within the specified period of time. Though the retries (twice) are executed, the IP cannot be sucked.	☞ {MT:4.26}
11367	Load IP suction error (2) (drop)	During bootup/routine processing/M-Utility, the IP is sucked to perform suction conveyance of the IP from the feed/load conveyor unit to the cassette; however, the CLOSE state (IP drop) of the suction sensor (SA5/11/17/23) is detected during IP conveyance. Though the retries (twice) for the IP suction are executed, the IP drop is detected again.	☞ {MT:4.26}
11425	Initialization cassette status error	During bootup, the IP is detected in the cassette set unit; however, the OPEN state of the cassette IN sensor (SA2/8/14/20) or the CLOSE state of the cassette hold sensor (SA3/9/15/21) is detected for the confirmation of the presence of cassette, so that inconsistency of the sensor status is detected.	☞ {MT:4.21}
11459	Initialization IP position information error	During bootup, the CMOS information (IP found) of the machine does not coincide with the remaining IP search processing result (IP not found), so that the user is notified.	☞ {MT:4.36}
11490	IP is overexposed	An overexposed IP was detected during bootup or routine processing.	-
11493	Dummy cassette ejection request	During bootup, a dummy cassette is detected, and ejection of the cassette is requested.	-
11494	Dummy cassette request	As no dummy cassette is detected upon termination, and insertion of the dummy cassette is requested.	-
11495	Remove an empty cassette	An empty cassette was detected during bootup.	-
11496	Unread IP was ejected	A cassette was loaded while the CL was not ready for reading.	-

Error Code	Error Name	Occurrence Condition	Analysis Flow
11498	Empty the largest cassette and insert the cassette	<User operation> The IP size was unknown or the ejection destination cassette was not found during bootup. <Action> Insert an empty cassette.	-
11499	IP reading suspended	A remaining IP that could not be returned as an unprocessed IP was detected at a position behind the subscanning unit during bootup. The error code is displayed in the LCD but not logged in the ERROR DB.	☞ {MT:4.37}
11510	Unread IP ejection (1)	<Faulty phenomenon> The IP can be conveyed during secondary erasure but is ejected to the cassette without being read during routine processing. <Occurrence conditions> This error occurs if CL CONFIG setup is performed to select "0: 1-1" for "21. Connecting Between Reader and Console" under "1. IMAGE MODALITY". <Servicing> The IP is ejected into a cassette without being read due to a cause attributable to the CL during routine processing. The IP is conveyed to the side-positioning conveyor and returned to the cassette without being read.	-
11511	Patient information not registered	<User operation> This error occurs during image output when the menu is not selected . <Occurrence condition> The patient information corresponding to the barcode of the processed IP has not been registered in the CL. Alternatively, the barcode cannot be read because the barcode affixed on the IP is soiled or the like.	-
11512	ID information obtaining error	Although the RU sent an ID information inquiry to the CL during routine processing, the RU could not obtain ID information due to a CL abnormality (except when the ID information could not be acquired due to an unregistered ID or barcode error). After the processed IP returns to a cassette, the cassette is ejected so that the associated message appears on the panel.	☞ {MT:14.}
11527	Invalid response from Start-Read command CL	Although the CL receives the Start-Read command from the RU, the CL transmits the reject command to the RU and displays the message accordingly on the CL window.	-
11530	Image data retransmission	The RU has retransmitted the image data to the CL	-
11531	Retransmission retry failure	During routine processing, an attempt is made to retransmit the unsent image data from the RU to the CL after communication with the CL is suspended; however, the CL rejects it, so that the image data is lost and the cassette is ejected.	☞ {MT:14.}
11687	Image data variation or back-side image signal connector error during bootup	An abnormal virtual data change was detected when the virtual data transfer diagnostics was conducted for bootup. In the virtual data transfer diagnostics for bootup, an abnormal virtual data change, disconnected image signal connector, or erroneous connector connection was detected.	☞ {MT:5.18}

Error Code	Error Name	Occurrence Condition	Analysis Flow
11731	Thermistor failure detection (during erasure initialization)	During bootup, it is detected that temperature control of the erasure unit is disabled due to temperature thermistor (THE1) error.	☞ {MT:6.5}
11737	Lamp unlit detection (during erasure initialization)	During bootup, the erasure lamps are turned on to check their lighting, but a single center lamp (socket L3) of the five erasure lamps is unlit. Or, two or more erasure lamps are unlit.	☞ {MT:6.2}
11751	Thermistor failure detection (during IP processing)	During routine processing, error for the temperature thermistor (THE1) is detected.	☞ {MT:6.5}
11757	Lamp unlit detection (during erasure idle temperature control)	During machine idle state, in order to perform erasure temperature control, the erasure lamps are turned on to check their lighting, but a single center lamp (socket L3) of the five erasure lamps is unlit. Or, two or more erasure lamps are unlit.	☞ {MT:6.2}
11766	Single lamp unlit detection (during IP erasure lighting)	When an attempt was made to illuminate the lamps for IP erasure during bootup or routine processing, one lamp did not illuminate. A message appears to notify the user that the IP will be inadequately erased.	☞ {MT:6.2}
11767	Lamp unlit detection (during IP erasure lighting)	During IP erasure, the erasure lamps are turned on to check their lighting, but a single center lamp (socket L3) of the five erasure lamps is unlit. Or, two or more erasure lamps are unlit.	☞ {MT:6.2}
11781	Thermistor failure detection (during idling)	During idle state after machine bootup, error for the temperature thermistor (THE1) is detected.	☞ {MT:6.5}
12030	Bitmap file load error	During bootup, loading of the bitmap file from the FLASH ROM to SD RAM fails.	☞ {MT:18.}
12071	FTP server access error	During bootup and during routine processing, the FTP server cannot be accessed for communication from the RU to the CL. Or, the FTP server may be accessed, but a connection cannot be established.	☞ {MT:7.}
12072	History file restore	As the history file on the FTP server is destroyed, it is restored from the backup file.	-
12080	MUTL mode multiple access warning	- "MUTL mode" functions are simultaneously activated for the RU. - The function that is entered first is activated, but the function that is entered second is not activated, and error is logged.	-
12101	Insufficient image data	Image data from the IMG17A/IMG17B board is insufficient. Although transfer was retried, a retry-over occurs. The insufficient data is complemented with image data of a uniform density.	☞ {MT:18.}
12102	Transfer retry due to insufficient image data	As the image data from the IMG17A/IMG17B board is insufficient, transfer was retried.	-

Error Code	Error Name	Occurrence Condition	Analysis Flow
12148	Image frame clock timeout	During routine processing, a timeout of the frame clock lock (information indicative of the leading edge of the image data) sent from the SCN17A/SCT17B board is detected by the sub-CPU. (30 seconds)	☞ {MT:6.1}
12149	Image processing pixel clock excess error	An error is detected for the pixel clock from the sub-CPU of the IMG17A/IMG17B board to the SCN17A/SCT17B board. - The pixel clock that is larger than the parameter value is detected. - The pixel clock, which is part of image data, denotes the number of pixels for one line of image data.	☞ {MT:6.1}
12150	Image processing pixel clock shortage error	During routine processing, when the image data from the SCN17A/SCT17B board is processed, an insufficient number of pixels for a certain line is detected by the sub-CPU.	☞ {MT:6.1}
12151	Image processing line clock excess error	During routine processing, when the image data from the SCN17A/SCT17B board is processed, an excess number of lines is detected.	☞ {MT:6.1}
12152	Image processing line clock shortage error	During routine processing, when the image data from the SCN17A/SCT17B board is processed, an insufficient number of lines is detected, or even when five seconds have passed after the trailing edge of a certain line clock, the trailing edge of its subsequent line clock is not detected.	☞ {MT:6.1}
12153	Image processing frame clock error	During routine processing, when an image processing command is accepted from the SCN17A/SCT17B board to the sub-CPU, the sub-CPU has already received the frame clock from the SCN.	☞ {MT:6.1}
12154	Image processing overrun error	During routine processing, the main CPU loses some of the image data from the sub-CPU.	☞ {MT:18.}
12164	FIFO data count shortage error	During routine processing, the sub-CPU completes its processing normally, but the number of pixels received by the main CPU via the FIFO is insufficient.	☞ {MT:18.}
12165	FIFO data count excess error	During routine processing, the sub-CPU completes its processing normally, but the number of pixels received by the main CPU via FIFO is excessive.	☞ {MT:18.}
12201	Start-point detection error	During bootup, error for the start-point detection signal (SSH, SSL) is detected.	☞ {MT:5.10}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12202	Leading-edge detection error	During bootup, only error for the leading-edge detection signal (SED1L) is detected.	☞ {MT:5.14}
12203	SCN sync signal error	During bootup, an SCN board diagnostic error (no main-scan sync signal is generated) associated with polygon error occurs.	☞ {MT:5.8}
12204	Polygon index signal error	During bootup, an SCN board diagnostic error (no polygon index signal is generated) associated with polygon error occurs.	☞ {MT:5.8}
12210	Polygon time-out	During bootup or during routine processing, the polygon OK signal cannot be detected within 7.5 seconds after the polygon is turned ON.	-
12211	PMT analog power supply error	During bootup and routine processing, error for the PMT analog power supply signal (+15VOKH, +15VOKL) is detected.	☞ {MT:5.12}
12212	Laser light intensity error	During bootup and routine processing, error for the laser OK signal (LD1OKH, LD1OKL) is detected.	☞ {MT:5.7}
12213	Polygon lock error	During bootup and routine processing, error for the polygon lock signal (POKL, PONL) is detected.	☞ {MT:5.8}
12214	Polygon rotation error	During bootup and routine processing, error is detected for the polygon rotation detection function on the SCN17A/SCT17B board.	☞ {MT:5.19}
12215	PLL function error	During bootup and routine processing, error is detected for the PLL function on the SCN17A/SCT17B board.	☞ {MT:5.19}
12216	Start-point interval error	During bootup and routine processing, error is detected for the start-point interval function on the SCN17A/SCT17B board.	☞ {MT:5.19}
12217	High-voltage command value error	During bootup and routine processing, error is detected for the high-voltage command value diagnostics signal on the SCN17A/SCT17B board.	☞ {MT:5.19}
12218	High-voltage detection value error	During bootup and routine processing, error is detected for the high-voltage detection value diagnostics signal on the SCN17A/SCT17B board.	☞ {MT:5.19}
12222	Laser drive current value error	During bootup and routine processing, the laser drive current value (LDIF) is more than 1.4 times the factory default value.	☞ {MT:5.15}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12225	Reading status error	During routine processing, error is detected for the VSYNC signal on the SCN17A/SCT17B board.	☞ {MT:18.}
12226	Operation line status error	During routine processing, error is detected for the SEDTM/FCLKTM signal on the SCN17A/SCT17B board.	☞ {MT:18.}
12241	Scanner control board error (1)	During bootup or during routine processing, error is detected for the PLL function, polygon rotation function, start-point interval function on the SCN17A/SCT17B board.	☞ {MT:5.19}
12242	Scanner control board error (2)	During routine processing, because the PMT high-voltage value is not set correctly on the SCN17A/SCT17B board, error is detected for the high-voltage command diagnostics.	☞ {MT:5.19}
12243	Scanner control board error (3)	During bootup or during routine processing, error is detected for the start-point mask signal generated from the SCN17A/SCT17B board and the index signal (PINDXL) from the polygonal mirror (POL).	☞ {MT:5.19}
12244	Scanner control board error (4)	During routine processing, an SCN board diagnostic error associated with polygon error is detected. Because the PLL on the SCN17A/SCT17B board does not oscillate, a polygon sync signal cannot be detected.	☞ {MT:5.8}
12251	Photomultiplier control board error (1)	During bootup or during routine processing, only error for the PMT analog power supply signal (+15VOKH, +15VOKL) is detected (detail code: 008100). Note that if the HV is OFF, the detail code is 008000.	☞ {MT:5.12}
12252	Photomultiplier control board error (2)	During bootup or during routine processing, only error for the high-voltage power supply signal (HVOKH, HVOKL) is detected.	☞ {MT:5.12}
12255	Leading-edge detection error (1)	During bootup or during routine processing, only error for the leading-edge detection signal (SED1, SED2L) is detected.	☞ {MT:5.14}
12256	Leading-edge detection timing error	During routine processing, IP conveyance overrun occurs due to mechanical error or SCN17A/SCT17B board control error, and only error for the SEDTM and FCLKTM signals on the SCN17A/SCT17B board is detected.	☞ {MT:5.14}
12261	Polygon rotation error (1)	During bootup, error for the polygon lock signal (PONL, POKL) is detected so that the polygonal mirror function is disabled. The start-point detection (SYN) and leading-edge detection (SED) functions are also disabled.	☞ {MT:5.8}
12262	Polygon rotation error (2)	During bootup, error for the polygon lock signal (PONL, POKL) and error for the start-point interval function and polygon rotation detection function on the SCN17A/SCT17B board are detected (detail code: 003400).	☞ {MT:5.8}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12263	Polygon rotation error (3)	During bootup, only error for the lock signal (POKL, PONL) from the polygonal mirror (POL) is detected (detail code: 002001). If error for the SEDTM or FCLKTM signal on the SCN17A/SCT17B board is detected, the detail code is 002003.	☞ {MT:5.8}
12264	Polygon rotation error (4)	During bootup or during routine processing, error for the signals (PONL, POKL, PINDXL) from the polygonal mirror and the SEDTM signal on the SCN17A/SCT17B board is detected (detail code: 001002). Alternatively, error for the index signal (PINDXL) from the polygonal mirror and the SEDTM and FCLKTM signals on the SCN17A/SCT17B board is detected (detail code: 001000). Alternatively, error for the signals (POKL, PINDXL) from the polygonal mirror and the SEDTM signal on the SCN17A/SCT17B board is detected (error code: 101000).	☞ {MT:5.8}
12270	LDIFMAX update	During routine processing, a change by 5 mA or more in LD driving current value is detected when controlling an insufficient light quantity (to keep the light quantity of the similar level) due to degradation of the LD.	-
12271	Laser unlit error (1)	During routine processing, the laser (LDD) and start-point detection (SYN) functions are disabled due to blow of the fuse (G011 and H011 on the SCN17A/SCT17B board) or laser failure (detail code: 805413, C05413, 00503).	☞ {MT:5.9}
12272	Insufficient laser light intensity	During routine processing, the laser light intensity is less than 50%, and the laser light intensity error signal (LD1OKL, LD1OKH) is detected (detail code: 004000). Alternatively, the laser light intensity error signal (LD1OKL, LD1OKH) and laser drive current value (LDIF) error are detected (detail code: 014000).	☞ {MT:13.}
12273	Laser life warning	During routine processing, the laser drive current value (LDIF) is more than 1.4 times the factory default value.	☞ {MT:5.15}
12281	Start-point detection error (1)	During bootup, the disabled state of the start-point detection (SYN) function, and error for the PLL function and polygon rotation detection function on the SCN17A/SCT17B board are detected (detail code: 801C03). Alternatively, the disabled state of the start-point detection (SYN) function, and error for the PLL function on the SCN17A/SCT17B board are detected (detail code: 800C03). Alternatively, during routine processing, the disabled state of the start-point detection (SYN) function, and error for the PLL function and polygon rotation detection function on the SCN17A/SCT17B board are detected (detail code: 801401).	☞ {MT:5.10}
12282	Start-point detection error (2)	During bootup and routine processing, only error for the start-point interval function on the SCN17A/SCN17B board is detected (detail code: 000400). Alternatively, error for the start-point interval function and polygon rotation detection function on the SCN17A/SCN17B board is detected (detail code: 001401).	☞ {MT:5.10}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12283	Scanning optics unit board error during bootup	During bootup, the laser (LDD), start-point detection (SYN), and leading-edge detection (SED) functions are disabled due to laser failure or disconnected connector.	☞ **{MT:5.15}**
12284	LD monitor value error warning	During IP reading, the laser drive current value (LDIF) becomes more than 1.4 times the factory default value.	☞ **{MT:5.15}**
12285	HV command value error warning	During IP reading, error is detected for the HV command value signal sent from the SCN17A/SCT17B board to the PMT17A/PMR17B board. The difference between MIN and MAX of the monitor value relative to the setup value is out of specification.	☞ **{MT:5.16}**
12286	HV detection value error warning	During routine processing, error is detected for the HV detection value signal of the PMT17A/PMR17B board. The difference between MIN and MAX of the monitor value relative to the setup value is out of specification.	☞ **{MT:5.16}**
12287	Image data variation or image signal connector error during routine processing	An abnormal image data change was detected when the image data transfer diagnostics was conducted for scanner diagnostics during routine processing. In the image data transfer diagnostics for scanner diagnostics during routine processing, an abnormal virtual data change, disconnected image signal connector, or erroneous connector connection was detected.	☞ **{MT:5.17}**
12291	Reading sequence error	During routine processing, error for the VSYNC signal on the SCN17A/SCT17B board is detected after IP reading is completed (detail code: 000002).	☞ **{MT:18.}**
12292	Reading sequence error during routine (2)	Reading is completed by any interrupt other than the leading-edge detection interrupt or end-of-screen interrupt. At the same time, an insufficient number of output lines and a too-early start of reading are detected (detail code: 000003).	-
12295	Scanner send/receive error	During bootup, or during routine processing, or in the Maintenance Utility, control communication between the CPU91A board and SCN17A/SCT17B board is performed; however, because error for the scanner unit is detected, the control communication does not end normally.	☞ **{MT:5.19}**
12296	Scanner send sum check error	During bootup, during routine processing, or in the Maintenance Utility, control communication between the CPU91A board and SCN17A/SCT17B board can be done; however, sum check error is detected from the SCN17A/SCT17B board.	☞ **{MT:5.19}**
12297	Communication receive size error	During bootup, or during routine processing, or in the Maintenance Utility, communication between the CPU91A board and SCN17A/SCT17B board can be done; however, data size error is detected from the SCN17A/SCT17B board.	☞ **{MT:5.19}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
12298	Scanner retry error	During routine processing, because scanner-related error is detected, the IP is returned to the cassette and scanner initialization is performed, with a retry made for routine processing.	☞ **{MT:5.11}**
12299	Error for scanner, etc.	During bootup or routine processing, a combination of errors that should not have logically occurred were generated.	-
12320	Cassette setting status warning (1)	<User operation> After the cassette is loaded, the cassette is pulled out immediately. <Occurrence condition> During routine processing/M-Utility, the cassette hold solenoid (SOLA1/2/3/4) is turned OFF to hold the cassette, and the hold pin protrudes; however, the cassette ejection sensor (SA1/7/13/19) transitions to OPEN.	☞ **{MT:4.39}**
12321	Cassette hold retry	During routine processing/M-Utility, the cassette hold solenoid (SOLA1/2/3/4) is turned OFF to hold the cassette, and the hold pin protrudes; however, the cassette hold sensor (SA3/9/15/21) does not transition to OPEN, thus resulting in a retry.	☞ **{MT:4.37}**
12322	Cassette setting status warning (2)	During routine processing/M-Utility, when a sensor check is made after cassette loading, the OPEN state of the cassette ejection sensor (SA1/7/13/19) is detected.	☞ **{MT:4.38}**
12324	Hold pin release retry	During bootup/routine processing/M-Utility, the cassette hold solenoid (SOLA1/2/3/4) is turned ON to release the cassette hold; however, the cassette hold sensor (SA3/9/15/21) does not transition to CLOSE, thus resulting in a retry.	☞ **{MT:4.37}**
12328	Feed IP suction retry (1)	During routine processing/M-Utility/abnormality processing, the IP suction pump (PA1/2/3/4) is driven to convey the IP from the cassette to the feed/load conveyor unit; however, the suction sensor (SA5/11/17/23) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ **{MT:4.26}**
12329	Feed IP suction retry (2) (drop)	During routine processing/M-Utility/abnormality processing, the IP is sucked to convey the IP from the cassette to the feed/load conveyor unit; however, the CLOSE state of the suction sensor (SA5/11/17/23) is detected during IP conveyance, thus resulting in a retry.	☞ **{MT:4.26}**
12330	Feed/load unit entrance IP feed conveyance retry	During routine processing/M-Utility/abnormality processing, an attempt is made to convey the IP from the cassette to the feed/load conveyor unit; however, the IP feed/load sensor (SB1/2/3/4) does not transition to CLOSE, thus resulting in retries (twice) for suction operation.	☞ **{MT:4.22}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
12331	IP-feed air leak warning	During routine processing/M-Utility/abnormality processing, the IP leak valve (SVA1/2/3/4) is driven to convey the IP from the cassette to the feed/load conveyor unit, and the IP suction pump (PA1/2/3/4) is stopped; however, the suction sensor (SA5/11/17/23) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.41}**
12332	Feed IP conveyance error (1)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the pre-BCR IP sensor (SB5) does not transition to CLOSE within the specified period of time. Therefore, a retry was performed.	☞ **{MT:4.23}**
12333	Feed IP conveyance error (2)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the side-positioning entrance IP sensor (SG1) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.23}**
12334	Feed IP conveyance error (3)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the pre-BCR IP sensor (SB5) does not transition to OPEN within the specified period of time. Therefore, a retry was performed.	☞ **{MT:4.23}**
12335	Feed IP conveyance error (4)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the side-positioning IP sensor (SC3) does not transition to CLOSE within the specified period of time. Therefore, a retry was performed.	☞ **{MT:4.23}**
12336	Feed IP sensor failure (1) (SB5 failure)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the side-positioning IP sensor (SC3) or side-positioning entrance IP sensor (SG1) transitions to CLOSE before the pre-BCR IP sensor (SB5) transitions to CLOSE. Therefore, a retry was performed.	☞ **{MT:4.23}**
12337	Feed IP sensor failure (2) (SG1 failure)	During routine processing/M-Utility, the IP transport motor (MB1, MB2, MC3) is driven to convey the IP from the feed/load conveyor unit to the side-positioning conveyor unit; however, the side-positioning IP sensor (SC3) transitions to CLOSE before the side-positioning entrance IP sensor (SG1) transitions to CLOSE. Therefore, a retry was performed.	☞ **{MT:4.23}**
12343	IP barcode reading retry	During routine processing, the barcode cannot be read by the IP barcode reader (BCRC1) of the side-positioning conveyor unit.	☞ **{MT:4.28}**
12347	Reading and conveyance retry	As the IP cannot be conveyed to the reader unit within a specified time, a retry is made.	-

Error Code	Error Name	Occurrence Condition	Analysis Flow
12348	FFM motor rpm out of specification	During routine processing except for secondary erasure, the motor rotation W.F. error of the subscanning motor (MZ1) for the W.F. monitoring operation is detected.	☞ **{MT:4.29}**
12350	SE2 IP sensor status warning	During bootup/routine processing, the IP transport motor (MD2, ME1) is driven to convey the IP to the erasure conveyor unit after the IP is read, and the post-reading conveyance standby IP sensor (SE1) transitions to CLOSE; however, the switchback standby IP sensor (SE2) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.30}**
12357	into Erasure unit IP transporting retry warning	Although the IP transport motor (ME1) was driven for IP conveyance (erasure conveyor) during routine processing, the switchback standby IP sensor (SE2) was closed because the IP did not pass the sensor within the specified time. Consequently, the IP transport motor (ME1) operation was retried.	☞ **{MT:4.27}**
12359	Post-erasure feed/load unit IP conveyance error	During bootup/routine processing, the IP transport motor (ME1, MB1, MB2) is driven to convey the IP to the cassette after the IP is erased; however, the pre-BCR IP sensor (SB5) does not transition to CLOSE within the specified period of time. Therefore, a retry was performed.	☞ **{MT:4.6}**
12360	Load IP conveyance error (1)	During bootup/routine processing, the IP transport motor (ME1, MB1, MB2) is driven to convey the IP to the cassette after the IP is erased, and the pre-BCR sensor (SB5) transitions to CLOSE; however, the IP feed/load sensor (SB1/2/3/4) for the shelf of interest does not transition to CLOSE within the specified period of time. Therefore, a retry was performed.	☞ **{MT:4.6}**
12363	Load IP conveyance error (4)	During bootup/routine processing, the IP transport motor (ME1, MB1, MB2) is driven to convey the IP to the feed/load conveyor unit after the IP is erased; however, the pre-BCR IP sensor (SB5) does not transition to OPEN within the specified period of time. Therefore, a retry was performed.	☞ **{MT:4.6}**
12366	Load IP suction retry (1)	During bootup/routine processing/M-Utility/abnormality processing, the IP suction pump (PA1/2/3/4) is driven to return the processed IP to the cassette; however, the suction sensor (SA5/11/17/23) does not transition to OPEN within the specified period of time, thus resulting in a suction retry.	☞ **{MT:4.26}**
12367	Load IP suction retry (2) (drop)	During bootup/routine processing/M-Utility, the IP suction pump (PA1/2/3/4) is driven to perform IP load conveyance, and the suction sensor (SA5/11/17/23) transitions to OPEN; however, the SA5/11/17/23 transitions to CLOSE (IP drop) during IP load conveyance, thus resulting in a suction retry.	☞ **{MT:4.26}**
12368	IP-load air leak warning	During bootup/routine processing/M-Utility/abnormality processing, the IP lead valve (SVA1/2/3/4) is driven to return the processed IP from the feed/load conveyor unit to the cassette, and the IP suction pump (PA1/2/3/4) is stopped; however, the suction sensor (SA5/11/17/23) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.41}**
12369	Path guide HP detection retry (1)	During bootup/routine processing/M-Utility, the convergence path changeover guide drive motor (MB3) is driven to perform home-positioning of the path changeover guide (feed/load conveyor unit); however, the path changeover HP sensor (SB11) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.7}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
12370	Path guide HP detection retry (2)	During bootup/routine processing/M-Utility, the convergence path changeover guide drive motor (MB3) is driven to perform home-positioning of the path changeover guide (feed/load conveyor unit); however, the path changeover shelf sensor (SB7/8/9) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.7}**
12371	Path guide changeover retry	During bootup/routine processing/M-Utility, the convergence path changeover guide drive motor (MB3) is driven to perform path changeover operation (feed/load conveyor unit); however, the path changeover shelf sensor (SB7/8/9) and path changeover HP sensor (SB11) do not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.7}**
12372	Convergence path guide changeover warning	During bootup/routine processing/M-Utility, the convergence path changeover guide drive motor (MB3) is driven to perform path changeover operation (feed/load conveyor unit) after IP erasure; however, the convergence path changeover sensor (SB10) does not transition to CLOSE within the specified period of time, thus resulting in HP positioning.	☞ **{MT:4.44}**
12373	Convergence path guide HP detection retry (2)	During bootup/routine processing/M-Utility, the convergence path changeover guide drive motor (MB3) is driven to perform path changeover operation (feed/load conveyor unit) after IP erasure; however, the convergence path changeover sensor (SB10) does not transition to CLOSE within the specified period of time.	☞ **{MT:4.44}**
12374	Side-positioning unit grip HP detection retry (1)	During bootup/M-Utility, the grip release motor (MC2) is driven for one pulse to perform grip home-positioning of the side-positioning conveyor unit; however, the grip release HP sensor (SC2) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.8}**
12375	Side-positioning unit grip HP detection retry (2)	During bootup/M-Utility, the grip release motor (MC2) is driven to perform grip home-positioning of the side-positioning conveyor unit; however, the grip release HP sensor (SC2) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.8}**
12376	Side-positioning unit grip HP detection retry (3)	During bootup/M-Utility, the grip release motor (MC2) is driven to perform grip home-positioning of the side-positioning conveyor unit; however, the grip release HP sensor (SC2) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ **{MT:4.8}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
12377	Side-positioning unit grip HP detection warning	During bootup/routine processing/M-Utility, the grip release motor (MC2) is driven to perform grip operation of the side-positioning conveyor unit; however, the grip release HP sensor (SC2) does not transition to CLOSE, so that home-positioning is performed.	☞ **{MT:4.8}**
12378	Post-reading conveyor unit grip HP detection retry (1)	During bootup/M-Utility, the grip release motor (MD1) is driven for one pulse to perform grip home-positioning of the post-reading conveyor unit; however, the grip release HP sensor (SD1) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.9}**
12379	Post-reading conveyor unit grip HP detection retry (2)	During bootup/M-Utility, the grip release motor (MD1) is driven to perform grip home-positioning of the post-reading conveyor unit; however, the grip release HP sensor (SD1) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.9}**
12380	Post-reading conveyor unit grip HP detection retry (3)	During bootup/M-Utility, the grip release motor (MD1) is driven to perform grip home-positioning of the post-reading conveyor unit; however, the grip release HP sensor (SD1) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ **{MT:4.9}**
12381	Post-reading conveyor unit grip HP detection retry (4)	During routine processing/primary erasure/M-Utility, the grip release motor (MD1) is driven after IP reading; however, the grip release HP sensor (SD1) does not transition to CLOSE, so that home-positioning is performed.	☞ **{MT:4.9}**
12382	Erasure unit grip HP detection retry (1)	During bootup/M-Utility, the grip release motor (ME3) is driven for one pulse to perform grip home-positioning of the erasure conveyor unit; however, the grip release HP sensor (SE5) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.10}**
12383	Erasure unit grip HP detection retry (2)	During bootup/M-Utility, the grip release motor (ME3) is driven to perform grip home-positioning of the erasure conveyor unit; however, the grip release HP sensor (SE5) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.10}**
12384	Erasure unit grip HP detection retry (3)	During bootup/M-Utility, the grip release motor (ME3) is driven to perform grip home-positioning of the erasure conveyor unit; however, the grip release HP sensor (SE5) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ **{MT:4.10}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
12385	Erasure unit grip HP detection warning	During bootup/M-Utility, the grip release motor (ME3) is driven to convey the IP after IP erasure; however, the grip release HP sensor (SE5) does not transition to CLOSE, so that home-positioning is performed.	☞ **{MT:4.10}**
12386	Side-positioning unit side-positioning mechanism HP detection retry (1)	During bootup/routine processing/M-Utility, the side-positioning motor (MC1) is driven for one pulse to perform home-positioning of the side-positioning mechanism (side-positioning conveyor unit); however, the side-positioning mechanism HP sensor (SC1) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.11}**
12387	Side-positioning unit side-positioning mechanism HP detection retry (2)	During bootup/routine processing/M-Utility, the side-positioning motor (MC1) is driven to perform home-positioning of the side-positioning mechanism (side-positioning conveyor unit); however, the side-positioning mechanism HP sensor (SC1) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.11}**
12388	Side-positioning unit side-positioning mechanism HP detection retry (3)	During bootup/routine processing/M-Utility, the side-positioning motor (MC1) is driven to perform home-positioning of the side-positioning mechanism (side-positioning conveyor unit); however, the side-positioning mechanism HP sensor (SC1) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ **{MT:4.11}**
12389	Side-positioning unit side-positioning mechanism HP detection warning	During bootup/routine processing/M-Utility, when the home position is checked after the side-positioning operation is completed at the side-positioning conveyor unit, the side-positioning mechanism HP sensor (SC1) does not transition to CLOSE, so that home-positioning is performed.	☞ **{MT:4.11}**
12390	Erasure unit side-positioning mechanism HP detection retry (1)	During bootup/routine processing/M-Utility, the side-positioning motor (ME2) is driven for one pulse to perform side-positioning mechanism home-positioning of the erasure conveyor unit; however, the erasure side-positioning mechanism HP sensor (SE4) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.33}**
12391	Erasure unit side-positioning mechanism HP detection retry (2)	During bootup/routine processing/M-Utility, the side-positioning motor (ME2) is driven to perform side-positioning mechanism home-positioning of the erasure conveyor unit; however, the erasure side-positioning mechanism HP sensor (SE4) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ **{MT:4.33}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
12392	Erasure unit side-positioning mechanism HP detection retry (3)	During bootup/routine processing/M-Utility, the side-positioning motor (ME2) is driven to perform side-positioning mechanism home-positioning in the erasure conveyor unit; however, the erasure side-positioning mechanism HP sensor (SE4) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ {MT:4.33}
12393	Erasure unit side-positioning mechanism HP detection warning	During bootup/routine processing/M-Utility, the erasure side-positioning mechanism HP sensor (SE4) does not transition to CLOSE after the side-positioning operation of the IP erasure conveyance is completed, so that home-positioning is performed.	☞ {MT:4.11}
12394	Suction cup HP detection retry (1)	During bootup/routine processing/M-Utility, the suction cup drive motor (MA1/2/3/4) is driven for one pulse to perform suction cup home-positioning; however, the suction cup HP sensor (SA4/10/16/22) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ {MT:4.12}
12395	Suction cup HP detection retry (2)	During bootup/routine processing/M-Utility, the suction cup drive motor (MA1/2/3/4) is driven to perform suction cup home-positioning; however, the suction cup HP sensor (SA4/10/16/22) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ {MT:4.12}
12396	Suction cup HP detection retry (3)	During bootup/routine processing/M-Utility, the suction cup drive motor (MA1/2/3/4) is driven to perform suction cup home-positioning; however, the suction cup HP sensor (SA4/10/16/22) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ {MT:4.12}
12398	Cleaning guide HP detection retry (1)	During bootup/M-Utility, the cleaning guide drive motor (MC4) is driven for one pulse to perform cleaning guide home-positioning; however, the cleaning guide HP sensor (SC4) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ {MT:4.13}
12399	Cleaning guide HP detection retry (2)	During bootup/M-Utility, the cleaning guide drive motor (MC4) is driven to perform cleaning guide home-positioning; however, the cleaning guide HP sensor (SC4) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ {MT:4.13}
12400	Cleaning guide HP detection retry (3)	During bootup/M-Utility, the cleaning guide drive motor (MC4) is driven to perform cleaning guide home-positioning; however, the cleaning guide HP sensor (SC4) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ {MT:4.13}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12401	Cleaning guide grip operation detection warning	During bootup/routine processing/M-Utility, the cleaning guide drive motor (MC4) is driven to grip the cleaning guide (guide-down); however, the cleaning guide HP sensor (SC4) does not transition to OPEN.	☞ {MT:4.13}
12402	Cleaning guide HP detection warning	During bootup/routine processing/M-Utility, the cleaning guide drive motor (MC4) is driven to release the grip of the cleaning guide (guide-up); however, the cleaning guide HP sensor (SC4) does not transition to CLOSE, so that home-positioning is performed.	☞ {MT:4.13}
12403	IP stopper HP detection retry (1)	During bootup/M-Utility, the IP stopper drive motor (MZ4) is driven for one pulse to perform IP stopper home-positioning; however, the IP stopper HP sensor (SZ5) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ {MT:4.14}
12404	IP stopper HP detection retry (2)	During bootup/M-Utility, the IP stopper drive motor (MZ4) is driven to perform IP stopper home-positioning; however, the IP stopper HP sensor (SZ5) does not transition to CLOSE within the specified period of time, thus resulting in a retry.	☞ {MT:4.14}
12405	IP stopper HP detection retry (3)	During bootup/M-Utility, the IP stopper drive motor (MZ4) is driven to perform IP stopper home-positioning; however, the IP stopper HP sensor (SZ5) does not transition to OPEN within the specified period of time, thus resulting in a retry.	☞ {MT:4.14}
12406	IP stopper protrusion detection warning	During bootup/routine processing/M-Utility, the IP stopper drive motor (MZ4) is driven for IP stopper protruding operation; however, the IP stopper HP sensor (SZ5) does not transition to OPEN, thus resulting in HP positioning.	☞ {MT:4.14}
12407	IP stopper HP detection warning	During bootup/routine processing/M-Utility, the IP stopper drive motor (MZ4) is driven for IP stopper retreating operation; however, the IP stopper HP sensor (SZ5) does not transition to CLOSE, so that home-positioning is performed.	☞ {MT:4.14}
12408	Suction cup HP detection warning (1)	During bootup/routine processing/M-Utility, when the suction cup home position is checked, the suction cup HP sensor (SA4/10/16/22) does not transition to CLOSE, so that home-positioning is performed.	☞ {MT:4.32}
12409	Suction cup HP detection warning (2)	During bootup/routine processing/M-Utility, when the suction cup home position is checked, the suction cup HP sensor (SA4/10/16/22) does not transition to CLOSE, so that home-positioning is performed.	☞ {MT:4.32}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12417	Driving-shaft grip speed correction value warning	For the correction processing during bootup/at the end of reading, the grip speed of the driving shaft is corrected; however, the driving-side grip release HP sensor (SZ2) does not transition to OPEN within the specified period of time, thus resulting in a retry for grip speed correction.	☞ {MT:4.15}
12418	Driving-shaft grip speed correction failure	For the correction processing during bootup/at the end of reading, the grip drive motor (MZ2) is driven to perform operation for correcting the grip speed of the driving shaft; however, the driving-side grip release HP sensor (SZ2) does not transition to OPEN within the specified period of time.	☞ {MT:4.15}
12430	Dust removal HP detection warning	During bootup and during routine processing, the home position of the dust removal mechanism is checked. As the dust removal HP detection sensor (SZ4) is in CLOSE, the dust removal motor (MZ3) is activated for home-positioning control.	☞ {MT:4.17}
12433	Dust removal HP detection retry (1)	During bootup, the dust removal motor (MZ3) is driven (counterclockwise) to perform home-positioning of the dust removal mechanism; however, the dust removal HP sensor (SZ4) does not transition to OPEN within the specified period of time, resulting in a retry.	☞ {MT:4.17}
12434	Dust removal HP detection retry (2)	During bootup, the dust removal motor (MZ3) is driven (counterclockwise) to perform home-positioning of the dust removal mechanism; however, the dust removal HP sensor (SZ4) does not transition to CLOSE within the specified period of time, resulting in a retry.	☞ {MT:4.17}
12440	Initialization convergence path IP conveyance warning (1)	During bootup, the IP transport motor (MB1, MB2, MC3) is driven to perform the remaining IP search processing, and before the side-positioning entrance IP sensor (SG1) and pre-convergence IP sensor (SB6) transition to OPEN, the OPEN state of the pre-BCR IP sensor (SB5) is detected. Because the IP may have been scratched, the IP should be checked for any scratch.	☞ {MT:4.18}
12441	Initialization convergence path IP conveyance warning (2)	During bootup, the IP transport motor (MB1, MB2, MC3) is driven to perform the remaining IP search processing, and the MB1, MB2, ME1 is stopped after the pre-convergence IP sensor (SB6) transitions to CLOSE; however, the pre-BCR IP sensor (SB5) does not transition to OPEN. Because the IP may have been scratched, the IP should be checked for any scratch.	☞ {MT:4.18}
12510	Image format error	During bootup or during routine processing, an illegal command is received from the CL.	-
12520	Message transmission failure	During bootup or routine processing, a message transmission from RU to CL is failed.	☞ {MT:14.}
12521	RES message receiving time-out	During bootup or routine processing, a REQUEST message is transmitted from RU to CL, however, RU cannot receive a RESPONSE message, thus resulting in a time-out.	☞ {MT:14.}
12522	ACK receiving time-out	During bootup or routine processing, a message is transmitted from RU to CL, however, RU cannot receive ACK, thus resulting in a time-out.	☞ {MT:14.}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12523	SET command CL receiving error	Although the SET command was transmitted from the RU during routine processing, a signal other than OK was received as a response from the CL. After the processed IP returns to a cassette, the cassette is ejected so that the associated message appears on the RU panel.	-
12524	Forbidden Response to Start-Process command	Although the Start-Process command was transmitted from the RU to the CL immediately after cassette insertion during routine processing, a rejection command was received from the CL. After the processed IP returns to a cassette, the cassette is ejected so that the associated message appears on the RU panel.	☞ **{MT:14}**
12525	Forbidden Response to INQ command	Although the INQ command was transmitted from the RU to the CL immediately after cassette insertion during routine processing, a rejection command was received from the CL. After the processed IP returns to a cassette, the cassette is ejected so that the associated message appears on the RU panel.	☞ **{MT:14}**
12526	Forbidden Response to Start-Read command	Although the Start-Read command was transmitted from the RU immediately before IP reading during routine processing, a rejection command was received from the CL. After the processed IP returns to a cassette, the cassette is ejected so that the associated message appears on the RU panel.	☞ **{MT:14}**
12611	Back-side PMT analog power supply error	During bootup and routine processing, only error for the PMT analog power supply signal (+15VOKH, +15VOKL) for back-side is detected.	☞ **{MT:5.13}**
12617	Back-side High-voltage command value error	During bootup and routine processing, error is detected only for the high-voltage command value diagnostics signal for back-side on the SCT17B board.	☞ **{MT:5.13}**
12618	Back-side High-voltage detection value error	During bootup and routine processing, error is detected only for the high-voltage detection value diagnostics signal for back-side on the SCT17B board.	☞ **{MT:5.13}**
12642	Back-side scanner control board error (2)	During routine processing, because the PMR high-voltage value is not set correctly on the SCT17B board, error is detected for the high-voltage command diagnostics for back side.	☞ **{MT:5.19}**

Error Code	Error Name	Occurrence Condition	Analysis Flow
12651	Back-side photomultiplier control board error (1)	During bootup and routine processing, only error for the PMR analog power supply signal (+15VOKH, +15VOKL) is detected (detail code: 008100). Note that if the HV is OFF, the detail code is 008000.	☞ {MT:5.13}
12652	Back-side photomultiplier control board error (2)	During bootup and routine processing, only error for the high voltage power supply signal (HVOKH, HVOKL) for back-side is detected.	☞ {MT:5.13}
12687	Image data variation or back-side image signal connector error during routine processing	An abnormal image data change was detected when the image data transfer diagnostics was conducted for scanner diagnostics during routine processing. In the image data transfer diagnostics for scanner diagnostics during routine processing, an abnormal virtual data change, disconnected image signal connector, or erroneous connector connection was detected.	☞ {MT:5.18}
12695	Back-side scanner send/receive error	During bootup, or during routine processing, or in the Maintenance Utility, control communication between the CPU91A board and SCT17B board is performed; however, because error for the scanner unit is detected, the control communication does not end normally.	☞ {MT:5.19}
12696	Back-side scanner send sum check error	During bootup, during routine processing, or in the Maintenance Utility, control communication between the CPU91A board and SCT17B board can be done; however, sum check error is detected from the SCT17B board.	☞ {MT:5.19}
12697	Back-side communication receive size error	During bootup, or during routine processing, or in the Maintenance Utility, communication between the CPU91A board and SCT17B board can be done; however, data size error is detected from the SCT17B board.	☞ {MT:5.19}
12700	CPU board initial diagnostic test error	<Servicing> It occurs when setup is made through DIP SW setting on the CPU91A board to perform total memory test during bootup. During bootup, error is detected for the total memory test.	-
12701	Bus error detection function error	An error is detected for the bus error detection function on the CPU91A board performed during bootup or routine processing.	☞ {MT:18.}
12702	H8 CPU interrupt error	During bootup or during routine processing, an interrupt test is conducted for "H8 CPU" of the scanner board (SCN17A/SCT17B) from the CPU91A board, but it does not end normally.	☞ {MT:6.1}
12703	Sensor board interrupt error	During bootup or during routine processing, an interrupt test is conducted for the sensor board (SNS17A/SNS17B) from the CPU91A board, but it does not end normally.	☞ {MT:6.3}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12705	LCD bus error	During bootup, the CPU91A board detects a bus error for the LCD panel.	☞ {MT:18.}
12733	High-temperature error detection (during erasure initialization)	During bootup, the temperature thermistor (THE1) detects high-temperature error.	☞ {MT:6.4}
12736	Single lamp unlit detection (during erasure initialization)	During bootup, because one of the five lamps is unlit, the machine is booted up in the mode where the erasure time is extended.	☞ {MT:6.2}
12743	Erasure unit high-temperature error cancel	During bootup and routine processing, 12733 or 12753 occurs and the temperature of the erasure unit lamp reaches an abnormal level, so that the no-erasure mode is temporarily entered. Subsequently, because the erasure lamp temperature drops below the specified temperature (erasable temperature), the normal mode is returned.	☞ {MT:6.4}
12753	Erasure unit high-temperature error	During routine processing and idling, the temperature thermistor (THE1) detects high-temperature error.	☞ {MT:6.4}
12756	Single lamp unlit detection (during erasure idle temperature control)	During idling, when the erasure lamps are turned on for erasure temperature control, a single lamp that is normally lit does not turn on, so that it enters the erasure time extension mode.	☞ {MT:6.2}
12766	Single lamp unlit detection (during IP erasure lighting)	During bootup and routine processing, when the erasure lamps are turned on during IP erasure, a single lamp is unlit, so that it enters the erasure time extension mode.	☞ {MT:6.2}
12778	Wait for erasure due to the out-of-temperature range	As the inside of the erasure unit is not within a specified temperature range, the erasure is awaited.	-
12779	Time-out in wait for erasure due to the out-of-temperature range	During routine processing, a wait occurs as the erasure unit is out of the specified temperature range before erasing the IP, and a time-out occurs.	-
12799	Self-reset procedure error	An interrupt is received such that the main CPU has accessed the self-reset register that is usually accessed during shutdown processing, using improper procedure.	☞ {MT:18.}
12800	Erasure unit safety thermostat "TSWE1" operation	During bootup and routine processing, because the erasure unit lamp housing reaches an abnormally high temperature, the safety thermostat TSWE1 is activated.	☞ {MT:6.4}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12810	Power supply A021 error	During bootup and during routine processing, it is detected that the "A021" fuse (F1) on the SNS17B board is blown.	☞ {MT:9.}
12811	Power supply A031 error	During bootup and during routine processing, it is detected that the "A031" fuse (F2) on the SNS17B board is blown.	☞ {MT:9.}
12812	Power supply A041 error	During bootup and during routine processing, it is detected that the "A041" fuse (F3) on the SNS17B board is blown.	☞ {MT:9.}
12813	Power supply A051 error	During bootup and during routine processing, it is detected that the "A051" fuse (F4) on the SNS17B board is blown.	☞ {MT:9.}
12814	Power supply A061 error	During bootup and during routine processing, it is detected that the "A061" fuse (F5) on the SCN17A/SCT17B board is blown.	☞ {MT:9.}
12820	Power supply B error 1	During bootup and during routine processing, it is detected that the voltage of the DRV17A-related +24V power supply is not outputted.	☞ {MT:9.}
12821	Power supply B011 error	During bootup and during routine processing, it is detected that the "B011" fuse (F1) on the DRV17A board is blown.	☞ {MT:9.}
12822	Power supply B021 error	During bootup and during routine processing, it is detected that the "B021" fuse (F2) on the DRV17A board is blown.	☞ {MT:9.}
12823	Power supply B031 error	During bootup and during routine processing, it is detected that the "B031" fuse (F3) on the DRV17A board is blown.	☞ {MT:9.}
12824	Power supply B041 error	During bootup and during routine processing, it is detected that the "B041" fuse (F4) on the DRV17A board is blown.	☞ {MT:9.}
12825	Power supply B051 error	During bootup and during routine processing, it is detected that the "B051" fuse (F5) on the DRV17A board is blown.	☞ {MT:9.}
12826	Power supply B061 error	During bootup and during routine processing, it is detected that the "B061" fuse (F6) on the DRV17A board is blown.	☞ {MT:9.}
12827	Power supply B071 error	During bootup and during routine processing, it is detected that the "B071" fuse (F7) on the DRV17A board is blown.	☞ {MT:9.}
12828	Power supply B081 error	During bootup and during routine processing, it is detected that the "B081" fuse (F8) on the DRV17A board is blown.	☞ {MT:9.}
12829	Power supply B091 error	During bootup and during routine processing, it is detected that the "B091" fuse (F9) on the DRV17A board is blown.	☞ {MT:9.}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12830	Power supply B101 error	During bootup and during routine processing, it is detected that the "B101" fuse (F10) on the DRV17A board is blown.	☞ {MT:9.}
12831	Power supply B111 error	During bootup and during routine processing, it is detected that the "B111" fuse (F11) on the DRV17A board is blown.	☞ {MT:9.}
12832	Power supply B121 error	During bootup and during routine processing, it is detected that the "B121" fuse (F12) on the DRV17A board is blown.	☞ {MT:9.}
12833	Power supply B131 error	During bootup and during routine processing, it is detected that the "B131" fuse (F13) on the DRV17A board is blown.	☞ {MT:9.}
12834	Power supply B141 error	During bootup and during routine processing, it is detected that the "B141" fuse (F14) on the DRV17A board is blown.	☞ {MT:9.}
12835	Power supply B151 error	During bootup and during routine processing, it is detected that the "B151" fuse (F15) on the DRV17A board is blown.	☞ {MT:9.}
12840	Power supply B series detection error (1)	During bootup and during routine processing, even though it is detected that the voltage of the DRV17A-related +24V power supply is not outputted, the output is detected at either of the detection points of "B011" through "B151".	☞ {MT:9.}
12841	Power supply B error 2	During bootup and during routine processing, it is detected that the voltage of the DRV17B-related +24V power supply is not outputted.	☞ {MT:9.}
12842	Power supply B161 error	During bootup and during routine processing, it is detected that the "B161" fuse (F1) on the DRV17B board is blown.	☞ {MT:9.}
12843	Power supply B171 error	During bootup and during routine processing, it is detected that the "B171" fuse (F2) on the DRV17B board is blown.	☞ {MT:9.}
12844	Power supply B181 error	During bootup and during routine processing, it is detected that the "B181" fuse (F3) on the DRV17B board is blown.	☞ {MT:9.}
12845	Power supply B191 error	During bootup and during routine processing, it is detected that the "B191" fuse (F4) on the DRV17B board is blown.	☞ {MT:9.}
12846	Power supply B201 error	During bootup and during routine processing, it is detected that the "B201" fuse (F5) on the DRV17B board is blown.	☞ {MT:9.}
12847	Power supply B211 error	During bootup and during routine processing, it is detected that the "B211" fuse (F6) on the DRV17B board is blown.	☞ {MT:9.}
12848	Power supply B221 error	During bootup and during routine processing, it is detected that the "B221" fuse (F7) on the DRV17B board is blown.	☞ {MT:9.}
12849	Power supply B231 error	During bootup and during routine processing, it is detected that the "B231" fuse (F8) on the DRV17B board is blown.	☞ {MT:9.}
12850	Power supply B241 error	During bootup and during routine processing, it is detected that the "B241" fuse (F9) on the DRV17B board is blown.	☞ {MT:9.}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12851	Power supply B251 error	During bootup and during routine processing, it is detected that the "B251" fuse (F10) on the DRV17B board is blown.	☞ {MT:9.}
12852	Power supply B261 error	During bootup and during routine processing, it is detected that the "B261" fuse (F11) on the DRV17B board is blown.	☞ {MT:9.}
12853	Power supply B281 error	During bootup and during routine processing, it is detected that the "B281" fuse (F12) on the DRV17B board is blown.	☞ {MT:9.}
12854	Power supply B series detection error (2)	During bootup and during routine processing, even though it is detected that the voltage of the DRV17B-related +24V power supply is not outputted, the output is detected at either of the detection points of "B161" through "B281".	☞ {MT:9.}
12860	Power supply C error 1	During bootup and during routine processing, it is detected that the voltage of the DRV17A-related +5V power supply is not outputted.	☞ {MT:9.}
12861	Power supply C error 2	During bootup and during routine processing, it is detected that the voltage of the DRV17B-related +5V power supply is not outputted.	☞ {MT:9.}
12862	Power supply D error	During bootup and during routine processing, it is detected that the voltage of +15V (D) power supply is not ouput.	☞ {MT:9.}
12863	Power supply D021 error	During bootup and during routine processing, it is detected that the "D021" fuse (F19) on the DRV17A board is blown.	☞ {MT:9.}
12864	Power supply D series detection error	During bootup and during routine processing, even though it is detected that the voltage of +15V (D) power supply is not output, the output is detected at a detection point of “D021” on the DRV17A board.	☞ {MT:9.}
12871	Power supply G011 error	During bootup and during routine processing, it is detected that the "G011" fuse (F3) on the SCN17A/SCT17B board is blown.	☞ {MT:9.}
12872	Power supply G021 error	During bootup and during routine processing, it is detected that the "G021" fuse (F4) on the SCN17A/SCT17B board is blown.	☞ {MT:9.}
12873	Power supply G031 error	During bootup and during routine processing, it is detected that the "G031" fuse (F8) on the SCN17A/SCT17B board is blown.	☞ {MT:9.}
12881	Power supply H011 error	During bootup and during routine processing, it is detected that the "H011" fuse (F2) on the SCN17A/SCT17B board is blown.	☞ {MT:9.}
12886	Power supply J011 error	During bootup and during routine processing, it is detected that the "J011" fuse (F6) on the SCN17A/SCT17B board is blown.	☞ {MT:9.}

Error Code	Error Name	Occurrence Condition	Analysis Flow
12874	Power supply G041 error	During bootup and during routine processing, it is detected that the "G041" fuse (F1) on the SCN17A/SCT17B board is blown.	☞ **{MT:9.}**
12875	Power supply G051 error	During bootup and during routine processing, it is detected that the "G051" fuse (F7) on the SCN17A/SCT17B board is blown.	☞ **{MT:9.}**
12881	SCN17A/SCT17B board fuse (F2) error	During bootup and during routine processing, it is detected that the “H011” fuse (F2) on the SCN17A/SCT17B board is blown.	☞ **{MT:9.}**
13032	Touch panel calibration file load log	<Service> - Because the touch panel is not calibrated after replacement of the IMG board and LCD panel, the file cannot be loaded. - During bootup, the touch panel calibration file cannot be loaded from the FLASH ROM to the SD RAM. - File loading could not be accomplished because no touch panel correction was provided after the RU application restoration procedure was performed.	-
13034	UI debug information	Unlikely error condition associated with the RU software occurs.	-
13035	initialization from the warm-up screen in mobile type equipment	While the use of mobile-type equipment was selected for configuration setup, the user pressed the “immediate start” key from the “warm-up” screen, which appeared at startup, to complete startup with the warm-up time reduced.	-
13036	Timer value changed from the warm-up screen in mobile type equipment	While the use of mobile-type equipment was selected for configuration setup, the user performed a timer value change procedure from the “warm-up” screen, which appeared at startup.	-
13200	High-voltage OFF during bootup	During bootup, the photomultiplier (PMT17A/PMR17B board) high voltage is OFF.	-
13210	Polygon timeout	During bootup and routine processing, the polygon OK signal is not detected within 7 seconds after turn-ON of the polygonal mirror.	-
13227	Reading IP size error	The IP of the size other than the input size is inserted for shading correction of the M-Utility, so that error is detected.	-
13228	SHD/POLYGON correction data error	- The correction is performed with the cleared portion due to image format displacement or with the image other than FLAT. The shading correction should be performed again. - During shading correction of the Maintenance Utility, error is detected for the correction calculation.	-
13229	HVCNT value error	During M-Utility operation, an out-of-spec HV is inputted.	-
13240	Start-point mask signal warning	- During bootup or during routine processing, the start-point mask signal issued from the SCN17A/SCT17B board varies by 0.02%, peak to peak. - During bootup or during routine processing, the detection of 12241 error is done with 2% variations.	-

Error Code	Error Name	Occurrence Condition	Analysis Flow
13260	Main-scan interval warning	During bootup or during routine processing, the range of variations in the main-scan interval is beyond the upper or lower limit of the error decision value parameter. <User operation> When vibration is applied to the machine from the outside while the adjuster bolt is not lowered, the vibration is transmitted to the scanning optics unit and logged. <Action> Check to ensure that the adjuster bolt is lowered.	-
13270	LDIFMAX update	This error occurs when the surrounding temperature around the machine changes drastically. During routine processing checks, it is detected that the LD drive current value varies by more than 5 mA. In order to adjust the insufficient luminosity due to degraded LD (to maintain the same level of luminosity), it is necessary to vary the LD drive current by more than 5 mA. During LDIFMAX update, variations of 5 mA or more are detected.	-
13284	LD monitor value error warning	During routine processing, the difference between MIN and MAX of the laser drive current monitor value is out of specification.	☞ {MT:5.15}
13285	HV command value error warning	During routine processing, error is detected for the HV command value signal sent from the SCN17A/SCT17B board to the PMT17A board. The difference between MIN and MAX of the monitor value relative to the setup value is out of specification.	☞ {MT:5.12}
13286	HV detection value error warning	During routine processing, error is detected for the HV detection value signal of the PMT17A board. The difference between MIN and MAX of the monitor value relative to the setup value is out of specification.	☞ {MT:5.12}
13290	Scanner data format error	When a restore command was executed in the M-Utility to write scanner data from a floppy disk to the IMG board flash ROM, the command did not terminate normally because a scanner data format error was detected.	-
13295	Scanner send/receive retry warning	When control communication was established between the CPU91A board and SCN17A/SCT17B board from the Maintenance Utility during bootup or routine processing, a scanner unit error was detected. Error recovery was achieved by performing a retry operation.	-
13411	Driving-shaft grip velocity correction process operation	When the grip drive motor (MZ2) was driven in the routine processing or M-Utility mode to perform a drive shaft grip operation other than for secondary erasure, the grip speed deviated from normal but remained within the acceptable range. Therefore, the speed was corrected after termination of reading.	☞ {MT:4.15}
13413	Driven-shaft grip release velocity correction process operation	When the grip drive motor (MZ2) was used in the routine processing or M-Utility mode to monitor the speed of a driven shaft grip release operation other than for secondary erasure, the speed deviated from normal but remained within the acceptable range. Therefore, the speed correction process was performed after termination of reading.	☞ {MT:4.15}
13289	Format adjustment data error	In the Maintenance Utility, when format adjustments are performed, out-of-range data is inputted.	-
13520	Detection of communication abortion to CL	During bootup or during routine processing, it is detected that the communication between the CL and the RU is broken.	☞ {MT:14.}

Error Code	Error Name	Occurrence Condition	Analysis Flow
13521	CL communication failure detected	During bootup or during routine processing, because the communication between the CL and RU is broken, the connection is suspended and initialization of communication between the CL and RU is performed again.	-
13530	CL image data receive timeout	The CL was too late receiving the image data sent from the RU, so that the image was retransmitted from the RU. The network is overloaded, or a communication error occurs due to hardware failure of the network, thereby causing frequent retries.	-
13629	Back-side HVCNT value error	During M-Utility operation, an out-of-spec HV is inputted.	-
13640	Back-side start-point mask signal warning	- During bootup and routine processing, the start-point mask signal issued from the SCT12B board varies by 0.02%, peak to peak. - During bootup and routine processing, the detection of 12241 error is done with 2% variations.	-
13660	Back-side main scan interval warning	During bootup or during routine processing, the scope of main-scan interval variations is outside the upper or lower limit of the error determination value parameter. <User operation> When vibration is applied to the machine from the outside while the adjuster bolt is not lowered, the vibration is transmitted to the scanning optics unit and logged. <Action> Check to ensure that the adjuster bolt is lowered.	-
13685	Back-side HV command value error warning	During routine processing, error is detected for the HV command value signal sent from the SCT17B board to the PMR17B board. The difference between MIN and MAX of the monitor value relative to the setup value is out of specification.	☞ {MT:5.13}
13686	Back-side HV detection value error warning	During routine processing, error is detected for the HV detection value signal of the PMR17B board. The difference between MIN and MAX of the monitor value relative to the setup value is out of specification.	☞ {MT:5.13}
13695	Back-side scanner send/receive retry warning	When control communication was established between the CPU17A board and SCT17B board during bootup or routine processing or in the Maintenance Utility, a scanner unit error was detected. Error recovery was achieved by performing a retry operation.	-
13699	Error for back-side scanner, etc.	During bootup and routine processing, a combination of errors that should not have logically occurred were generated.	-
13700	Backup SRAM test error	An error is detected for the backup SRAM test in MUTL: Board Check.	☞ {MT:18.}
13701	SDRAM test error	An error is detected for the SDRAM test in MUTL: Board Check.	☞ {MT:18.}
13702	Checksum error	The data in the flash ROM (IPL or APPL portion) of the RU is corrupted.	☞ {MT:18.}

Error Code	Error Name	Occurrence Condition	Analysis Flow
13703	Flash ROM read/write error	An error is detected for the flash ROM read/write test in MUTL: Board Check.	☞ {MT:18.}
13704	CPU91A interrupt error	An error is detected for the CPU91A interrupt test in MUTL: Board Check.	☞ {MT:18.}
13705	Network register error	An error is detected for the network register check in MUTL: Board Check.	☞ {MT:18.}
13706	SCN17A/SCT17B register test error	An error is detected for the register read/write test of SCN17A/SCT17B in MUTL: Board Check.	☞ {MT:18.}
13707	SCN17A/SCT17B interrupt error	An error is detected for the interrupt test of SCN17A/SCT17B in MUTL: Board Check.	☞ {MT:18.}
13708	SCN17A/SCT17B H8 communication error	An error is detected for the H8 communication test of SCN17A/SCT17B in MUTL: Board Check.	☞ {MT:18.}
13709	SNS17A/B board register error	An error is detected for the SCN17A/SNS17B register test in MUTL: Board Check.	☞ {MT:18.}
13710	Sensor test error	An error is detected for the sensor test in MUTL: Board Check.	☞ {MT:18.}
13711	Panel LED error	An error is detected for the panel LED test in MUTL: Board Check.	☞ {MT:18.}
13712	Solenoid error	An error is detected for the solenoid test in MUTL: Board Check.	☞ {MT:18.}
13713	Pulse motor error	An error is detected for the pulse motor test in MUTL: Board Check.	☞ {MT:18.}
13714	SNS17A/B board interrupt error	An error is detected for the SNS17A/B interrupt in MUTL: Board Check.	☞ {MT:18.}

Error Code	Error Name	Occurrence Condition	Analysis Flow
13715	INV17A/B register error	An error is detected for the register of the INV17A/B board in MUTL: Board Check.	☞ **{MT:18.}**
13716	Erasure lamp test error	An error is detected for the erasure lamp test in MUTL: Board Check.	☞ **{MT:18.}**
13717	Image processing CPU SDRAM test error	An error is detected for the SDRAM test of the image processing CPU in MUTL: Board Check.	☞ **{MT:18.}**
13718	Image processing FIFO test error	An error is detected for the FIFO test of the image processing CPU in MUTL: Board Check.	☞ **{MT:18.}**
13719	Barcode communication error	An error is detected for the barcode communication test in MUTL: Board Check.	☞ **{MT:18.}**
13820	Barcode data read test error	An error is detected for the barcode reading test in MUTL: Board Check.	☞ **{MT:18.}**
13821	Power supply monitoring register error	An error is detected for the power supply monitoring register check in MUTL: Board Check.	☞ **{MT:18.}**
19066	Insufficient resource for timer device	During bootup or during routine processing, the resource for the timer device becomes insufficient.	☞ **{MT:8.}**
19067	Insufficient resource for sync processing device	During bootup or during routine processing, the resource for the sync processing device becomes insufficient.	☞ **{MT:8.}**

◇ REFERENCE ◇

The error code table is stored as an access file (.mdb) in the installation CD-ROM of the RU software. The following example shows a path on which the CR-IR 363 error code table is stored when the installation CD-ROM of the RU software V2.4 is inserted into the D drive: D:\FujiFilm\FCR\CR-IR363\2.4\common\TOOL\EcodeMan.mdb.
Refer to the file in the installation CD-ROM when your information in the service manual is of an old version.

CR-IR362 Service Manual

Service Parts List (SP)

Control Sheet

Issue date	Revision number	Reason	Pages affected
07.22.2003	00	New relese	All pages
08.20.2003	01	Corrections (FM 4098)	All pages
02.20.2004	03	Corrections (FM 4181)	2-77
10.08.2004	04	Corrections (FM 4425)	6, 12, 15, 17, 24, 34, 35, 37, 38, 41-43, 47, 48, 50, 52-75
05.09.2005	05	Corrections (FM 4610)	6, 12, 15, 21, 26, 31, 38, 40, 45, 47, 48, 50, 71-74, 76
10.02.2006	06	Change of Corporate Name and Corporate Logo (FM 4977)	1, 53-70
02.19.2007	07	Change of document number, corrections (FM5097)	All pages
04.25.2008	08	Revision (FM5281)	1-12, 14-25, 27-47, 50, 52, 71-74, 76, 78
09.30.2009	09E	Revision (FM5539)	3-107

How to Use Service Parts List

■ RANK

● Handling RANK characters (parts that are handled in a special manner during parts operation, such as management)

Character	Under Warranty	Out of Warranty
R	Must be returned.	Repairable
Q	Must be returned. (We use for analysis.)	Not repairable
T	Must Not be returned. (Consumable part. Not applicable to free-of-charge warranty.)	Not repairable
without R, Q, T	Must Not be returned.	Not repairable

● Export regulation-applicable character(Parts with the following character are controlled by Export regulation.)

Character	Significance
+	Parts applicable to export regulations.

● Fault RANK characters (which provide reference for determining the recommended stock quantity)

All parts are assigned with one of characters A through E.

Character	Significance
A	Consumable parts or parts that will be replaced at short intervals.
B	Parts that may become faulty accidentally and have a relatively high failure rate.
C	Parts that have a sufficiently long MTBF, but are expected to have a relatively high failure rate.
D	Parts that have a sufficiently long MTBF, but are expected to become faulty.
E	Parts that are necessary for fault analysis, or parts that may be needed in case of unexpected accidents such as man-induced damage.

<The RANK guide>
The Fault RANK characters, Handling RANK characters, and Export regulation-applicable character are assigned in that order.
Thus, at least one character or up to three characters are assigned in the RANK column.

■ REF.NO.

REF. NO. is a part number indicated in the Service Parts Exploded Views. For parts having different functions, they are clearly distinguished in the REMARKS and SERIAL NUMBER columns.

■ PART NUMBER

PART NUMBER is a code number that is unique to each part. An alphabetic letter at the rightmost position of the code number has the following meaning.

○ For hardware
The alphabet denotes the version number of a part. If parts have different version numbers, they are upward-compatible.

○ For software
The alphabet denotes a difference in the specifications. Parts differing in the suffix are not compatible with each other. Version number is omitted in the list.

■ PART NAME

PART NAME represents a general name of a part.

■ QTY.

○ QTY. denotes the quantity of parts used in each unit.

○ A part whose quantity is suffixed with -S represents a small part that is shipped in packs of 50. (Even if such a part is ordered in quantity of 1, a pack containing 50 pieces of that part is supplied.)

■ REMARKS

The REMARKS column indicates a unique name of a part or relevant information of each part.

■ SERIAL NUMBER

The units may contain different parts depending on their shipment control number. SERIAL NUMBER indicates the shipment control number to which the relevant parts are applicable. If the SERIAL NUMBER column is blank, the parts are applicable to all the relevant units. The shipment control number is represented by lower five digits of eight-digit number indicated on the rating indication label.

■ REFER TO

The "REFER TO" column shows reference sections concerning the part. Clicking the reference section in the "REFER TO" column jumps to the top page of the reference section where the related information is in.

■ Recommended quantities of spare parts

It is recommended as a rough guide to hold in stock a certain quantity of parts according to the rank (A, B, C, D, E) assigned to the parts, as follows. For periodically replaced parts, hold them in stock separately. Adjust the stock quantity of service parts depending on the number of working units (N).
Quantity used in a single system : Q

○ $N = 1$
Rank A $= 1 + Q \times 0.3$
Rank C $= 1 + Q \times 0.05$
Rank D $= 1 + Q \times 0.02$

○ $2 \leqq N \leqq 10$
Rank A $= 2 + N \times Q \times 0.3$
Rank C $= 2 + N \times Q \times 0.05$
Rank D $= 1 + N \times Q \times 0.02$

○ $11 \leqq N \leqq 300$
Rank A $= 3 + N \times Q \times 0.3$
Rank C $= 3 + N \times Q \times 0.05$
Rank D $= 2 + N \times Q \times 0.02$

■ Precautions to be Observed When Returning Parts for Repair

When returning a component for repair, pack it in the same manner as for the supplied substitute, using the substitute packing materials.
The use of different packing materials or packing methods may incur damage to packed component during transit.

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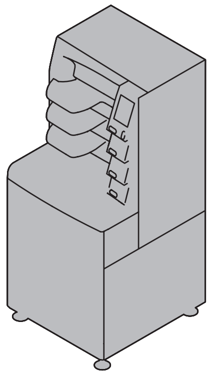

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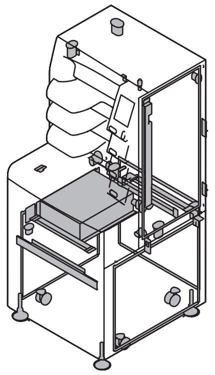

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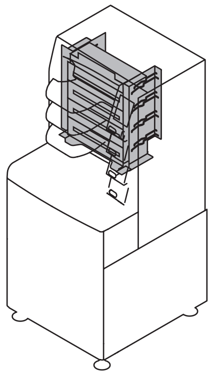

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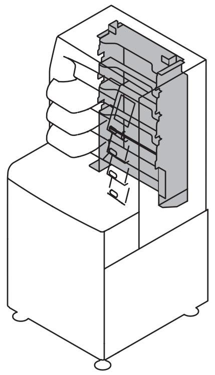

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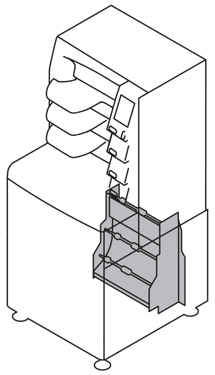

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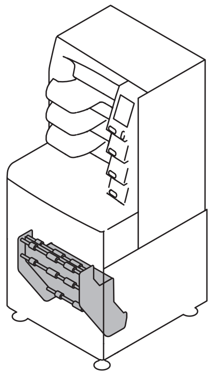

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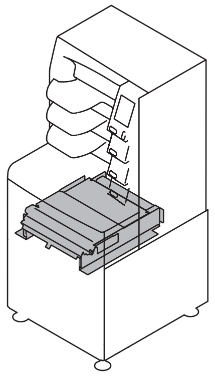

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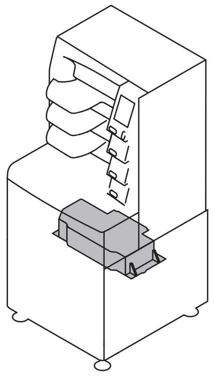

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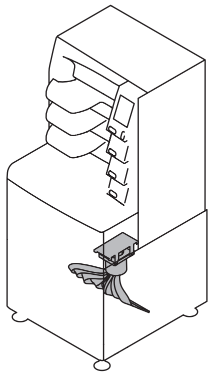

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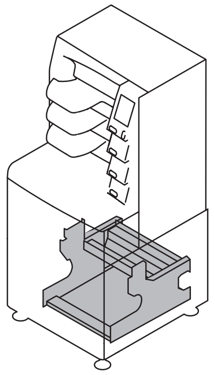

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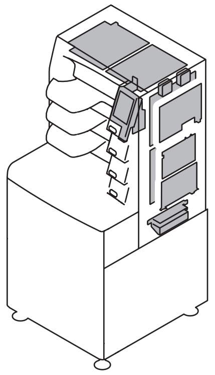

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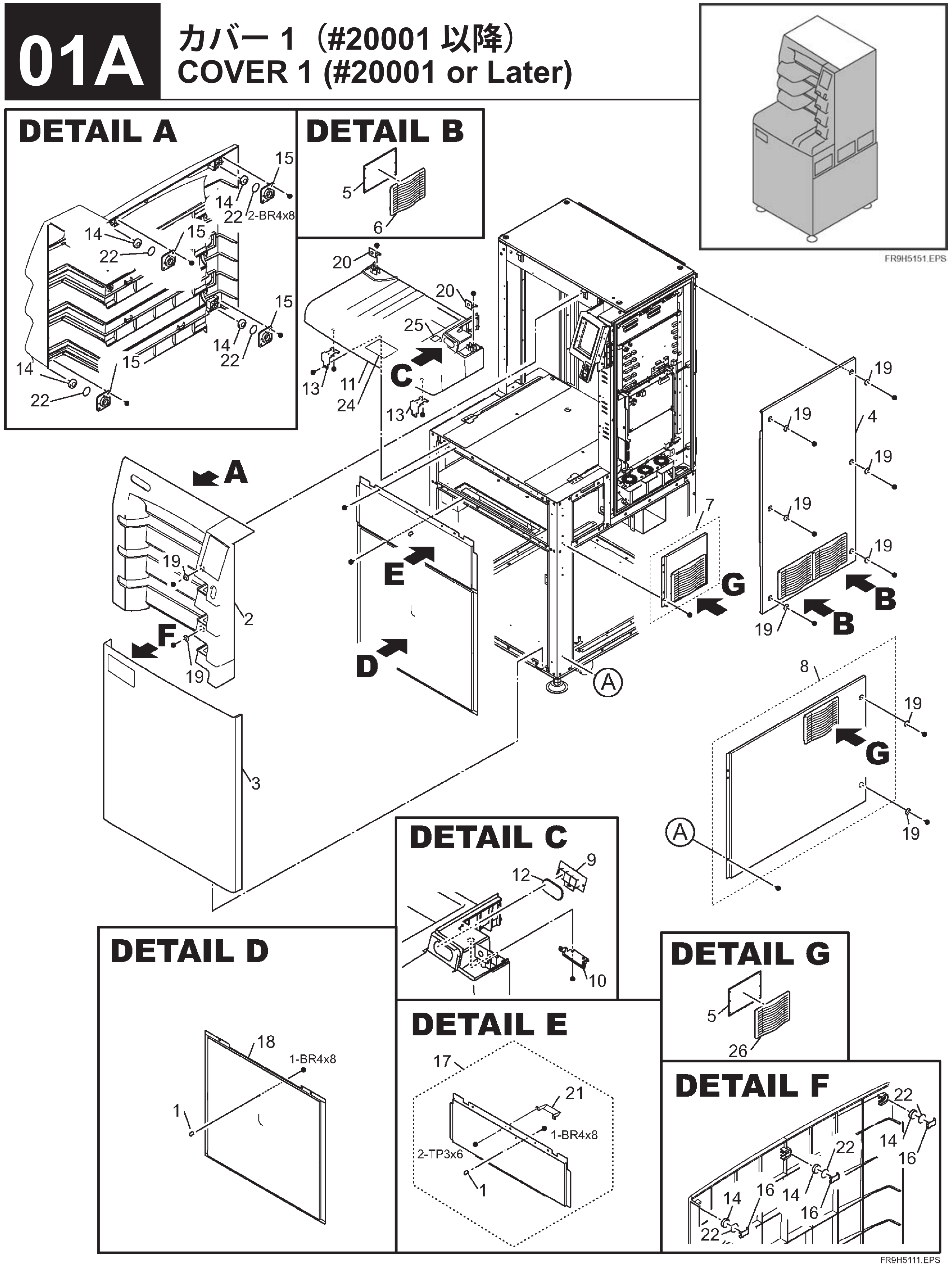
カバー 1（#20001 以降）
COVER 1 (#20001 or Later) 01A


DETAIL A
15
14
22
2-BR4x8
14
15
22
15
14
22
15
14
22
DETAIL B
5
6
20
20
25
C
13
11
24
13
A
19
2
F
19
E
D
3
7
G
B
B
19
4
19
19
19
19
19
A
8
19
G
19
A
FR9H5151.EPS
DETAIL C
9
12
10
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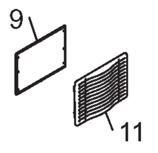
18
1-BR4x8
1
DETAIL E
17
21
1-BR4x8
2-TP3x6
1
DETAIL G
5
26
DETAIL F
22
22
14
16
14
16
14
16
22
FR9H5111.EPS

RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
D	1	343N0048	フック	Hook	2			–
E	2.1	350Y1694	カバー	Cover	1			☞{MC:3.1}
E	2.2	350Y1709	カバー	Cover	1	For PHILIPS		☞{MC:3.1}
E	3.1	350Y1703	カバー	Cover	1			☞{MC:3.1}
E	3.2	350Y1726	カバー	Cover	1	For PHILIPS		☞{MC:3.1}
E	4	350N2707C/D/E	カバー	Cover	1			☞{MC:3.1}
D	5	376N0238	エアフィルタ	Air Filter	4			☞{MC:3.2}
D	6	345N1683/A/B	ルーバ	Louver	2			☞{MC:3.2}
E	7	350Y1675A	カバー	Cover	1			☞{MC:3.1}
E	8	350Y1676A	カバー	Cover	1			☞{MC:3.1}
D	9	113Y1702C	ボードアセンブリ	Board Assembly	1	LED4		☞{MC:5.9}
E	10	356N9255B	ブラケット	Bracket	1			☞{MC:5.9}
E	11	357N1468D	台	Base	1			☞{MC:3.3}
A	12	603Y0064A	フィルタ	Filter	1	NO4		☞{MC:5.9}
E	13	356N9256B	ブラケット	Bracket	2			–
D	14	394S0036	永久磁石	Magnet	7			–
D	15	317N1065C	キャップ	Cap	4			–
D	16	332N0625	キャップ	Cap	3			–
E	17	345Y0296	遮板	Light Protect Plate	1			☞{MC:3.1}
E	18	345Y0299	遮板	Light Protect Plate	1			☞{MC:3.1}
E	19	350N2059A/B/C	カバー	Cover	10			–
E	20	356N9257C	ブラケット	Bracket	2			–
E	21	356Y0299	ブラケット	Bracket	1			☞{MC:3.1}
D	22	382N1636A	テープ	Tape	7			–
	23	***						
E	24	405N3068A	銘板	Label	1			–
E	25	405N3060A	銘板	Label	1			–
D	26	345Y0366	ルーバ	Louver	2	*1		–

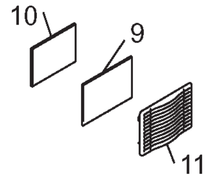
*1 耐熱タイプ／ Heat resistant type

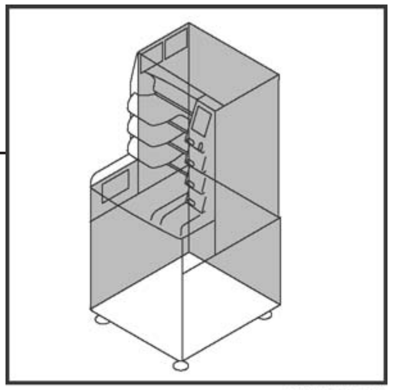
01B カバー 2（#20001 以降） COVER 2 (#20001 or Later)

DETAIL A



DETAIL B

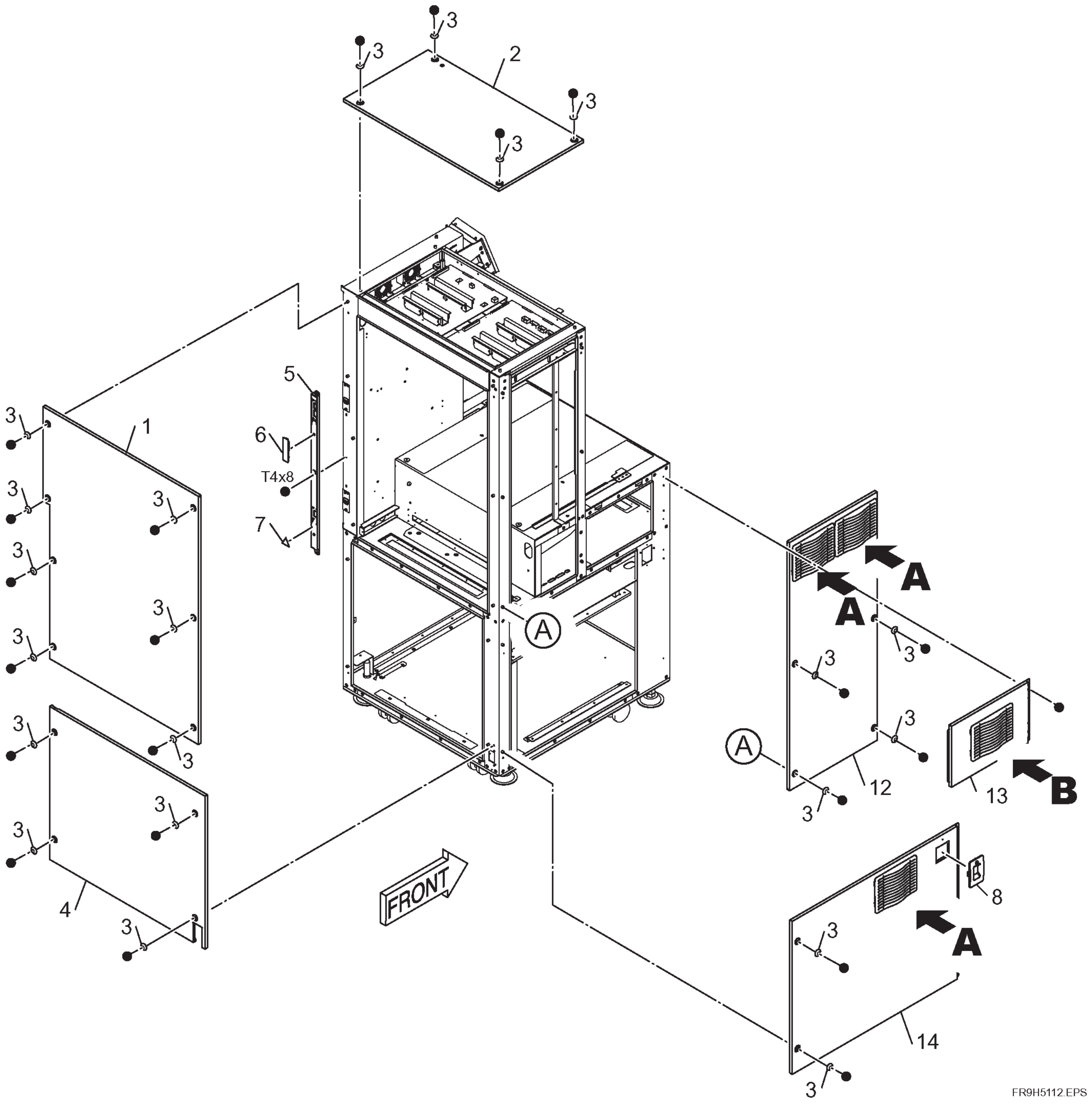




FR9H5152.EPS

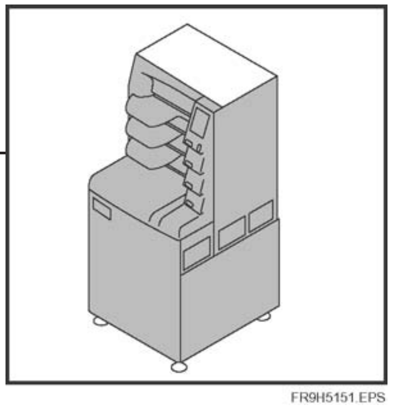
カバー 2（#20001 以降）
COVER 2 (#20001 or Later) 01B

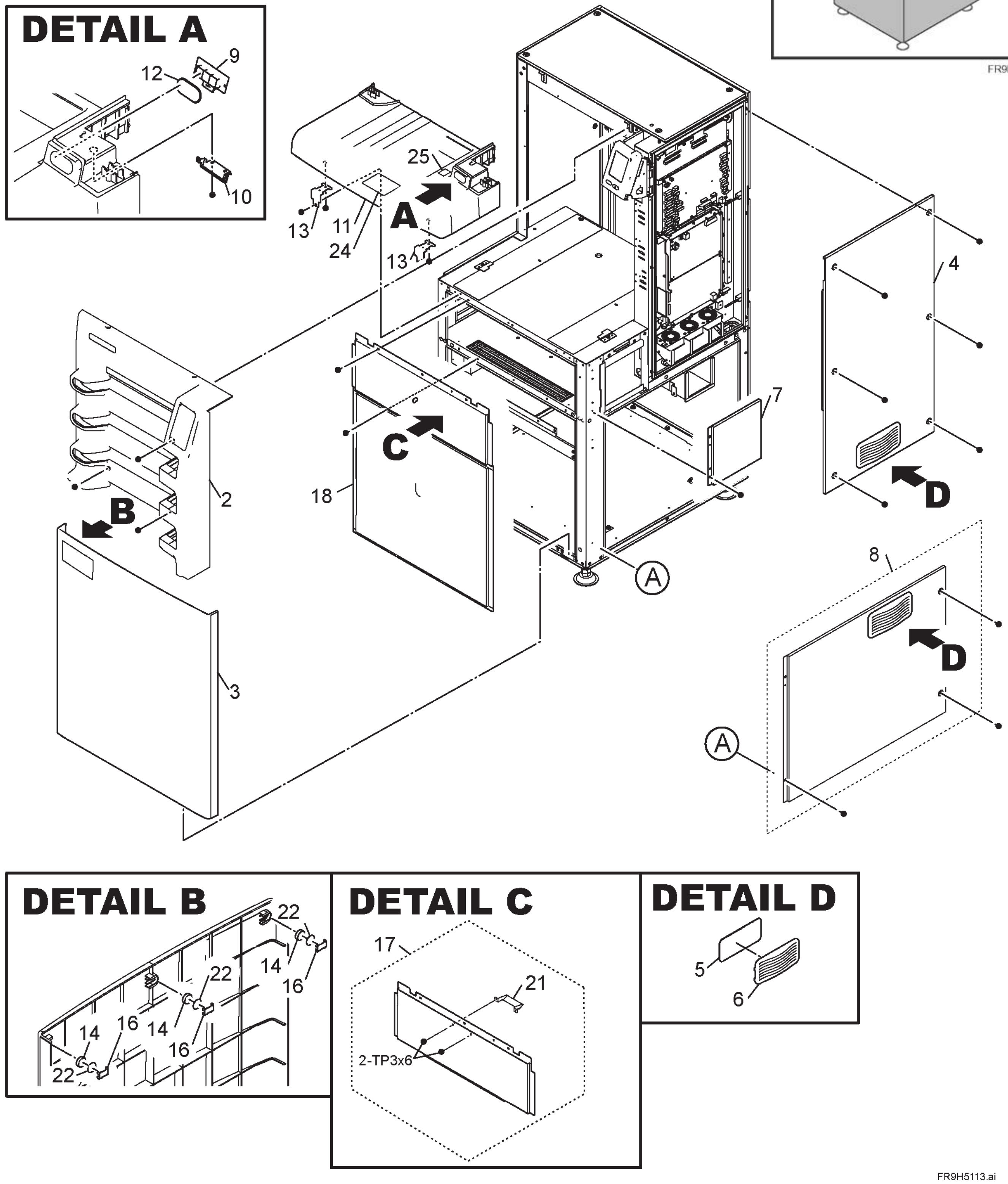
RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
E	1	350Y1680	カバー	Cover	1			☞{MC:3.1}
E	2	350Y1682	カバー	Cover	1			☞{MC:3.1}
E	3	350N2059A/B/C	カバー	Cover	21			–
E	4	350Y1681	カバー	Cover	1			☞{MC:3.1}
E	5	350N2763C	カバー	Cover	1			–
E	6	350N2738C	カバー	Cover	1			–
E	7	405N2505/A	銘板	Label	1			–
E	8	350N2731A	カバー	Cover	1			–
D	9	376N0238	エアフィルタ	Air Filter	4			☞{MC:3.2}
D	10	376N0234	メカニカルフィルタ	Mechanical Filter	1			☞{MC:3.2}
D	11	345N1683/A/B	ルーバ	Louver	4			☞{MC:3.2}
E	12	350Y1677	カバー	Cover	1			☞{MC:3.1}
E	13	350Y1678	カバー	Cover	1			☞{MC:3.1}
E	14	350Y1679	カバー	Cover	1			☞{MC:3.1}



FR9H5112.EPS

01C カバー 3（#50001 以降） COVER 3 (#50001 or Later)



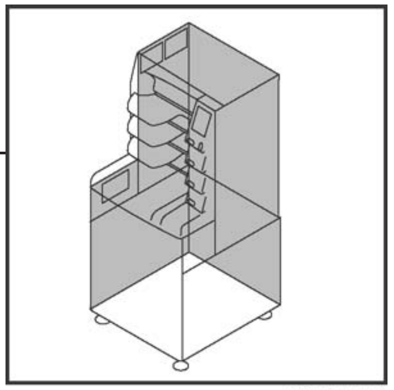


カバー 3（#50001 以降） COVER 3 (#50001 or Later) 01C

RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
	1	***						
E	2.1	350Y101188	カバー	Cover	1			☞{MC:3.1}
E	2.2	350Y101279	カバー	Cover	1	For PHILIPS		☞{MC:3.1}
E	3.1	350Y101280	カバー	Cover	1	For CR-IR362 for Japan		☞{MC:3.1}
E	3.2	350Y101281	カバー	Cover	1	For CR-IR362 except for Japan		☞{MC:3.1}
E	3.3	350Y101217	前下カバー	Cover	1	For CR-IR363, except for USA		☞{MC:3.1}
E	3.4	350Y101218	前下カバー	Cover	1	For CR-IR363, for USA		☞{MC:3.1}
E	3.5	350Y101282	前下カバー	Cover	1	For CR-IR362, for PHILIPS		☞{MC:3.1}
E	3.6	350Y101219	前下カバー	Cover	1	For CR-IR363, for PHILIPS		☞{MC:3.1}
E	4	350Y101145	カバー	Cover	1			☞{MC:3.1}
D	5	376N100047	メカニカルフィルタ	Mechanical Filter	2			☞{MC:3.2}
D	6	345N100520B	ルーバ	Louver	2			☞{MC:3.2}
E	7	350Y101178A	カバー	Cover	1			☞{MC:3.1}
E	8	350Y101139	カバー	Cover	1			☞{MC:3.1}
D	9	113Y1702C	ボードアセンブリ	Board Assembly	1	LED4		☞{MC:5.9}
E	10	356N9255B	ブラケット	Bracket	1			☞{MC:5.9}
E	11	357N100606	台	Base	1			☞{MC:3.3}
A	12	603Y0090	フィルタ	Filter	1	NO4		☞{MC:5.9}
E	13	356N9256B	ブラケット	Bracket	2			–
D	14	394S0036	永久磁石	Magnet	3			–
	15	***						
D	16	332N0625	キャップ	Cap	3			–
E	17	345Y100140	遮板	Light Protect Plate	1			☞{MC:3.1}
E	18	345Y100141	遮板	Light Protect Plate	1			☞{MC:3.1}
	19	***						
	20	***						
E	21	356Y0299	ブラケット	Bracket	1			☞{MC:3.1}
D	22	382N1636A	テープ	Tape	3			–
	23	***						
E	24	405N101760	銘板	Label	1			–
E	25	405N101759	銘板	Label	1			–
	26	***						

*1 耐熱タイプ／ Heat resistant type

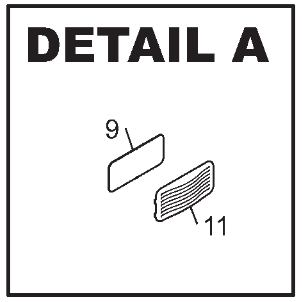
01D カバー 4（#50001 以降） COVER 4 (#50001 or Later)

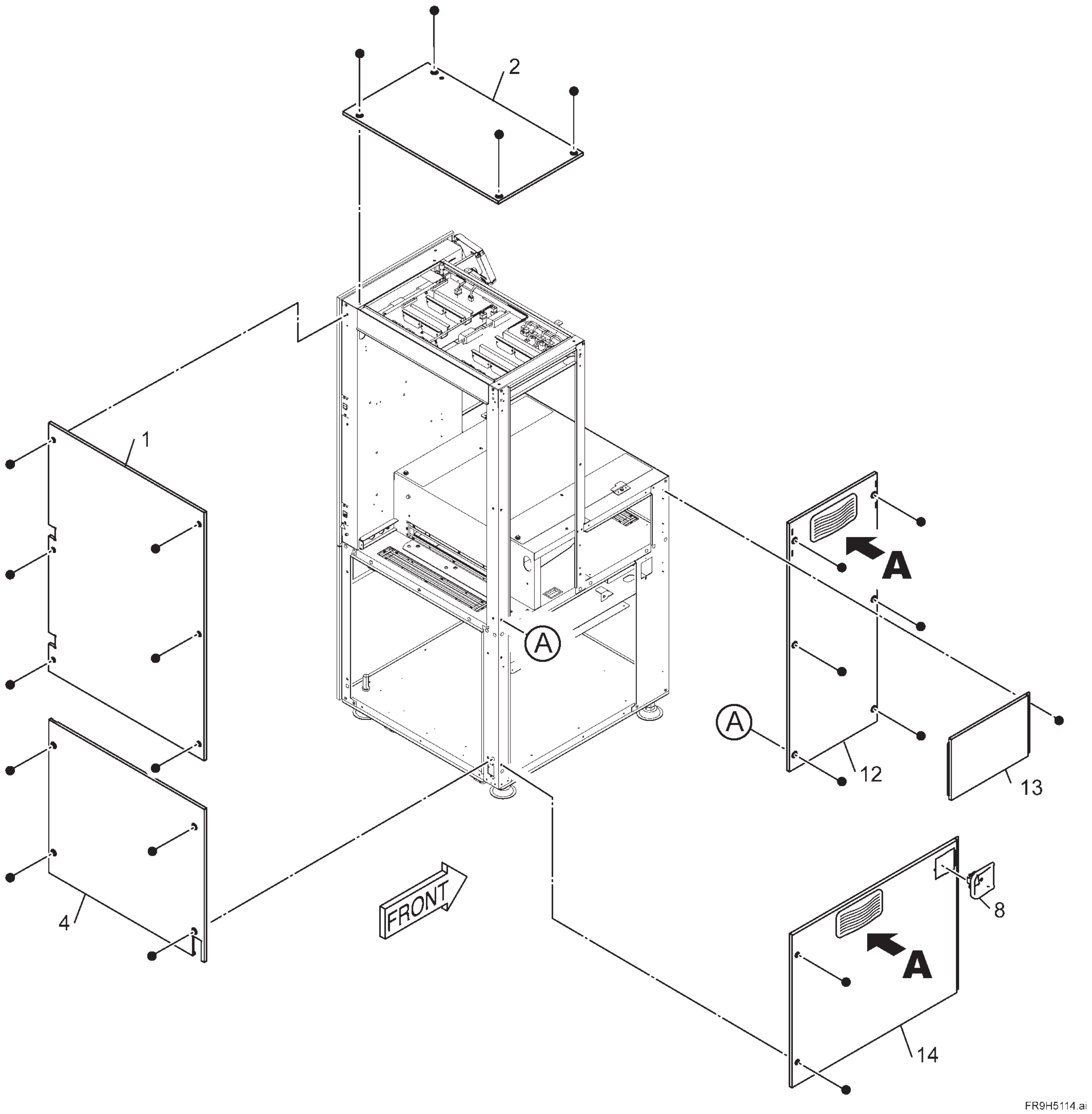


FR9H5152.EPS

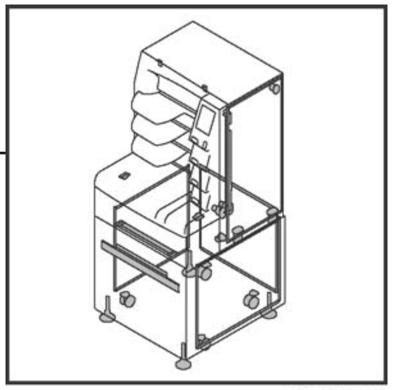
カバー 4（#50001 以降）
COVER 4 (#50001 or Later) 01D

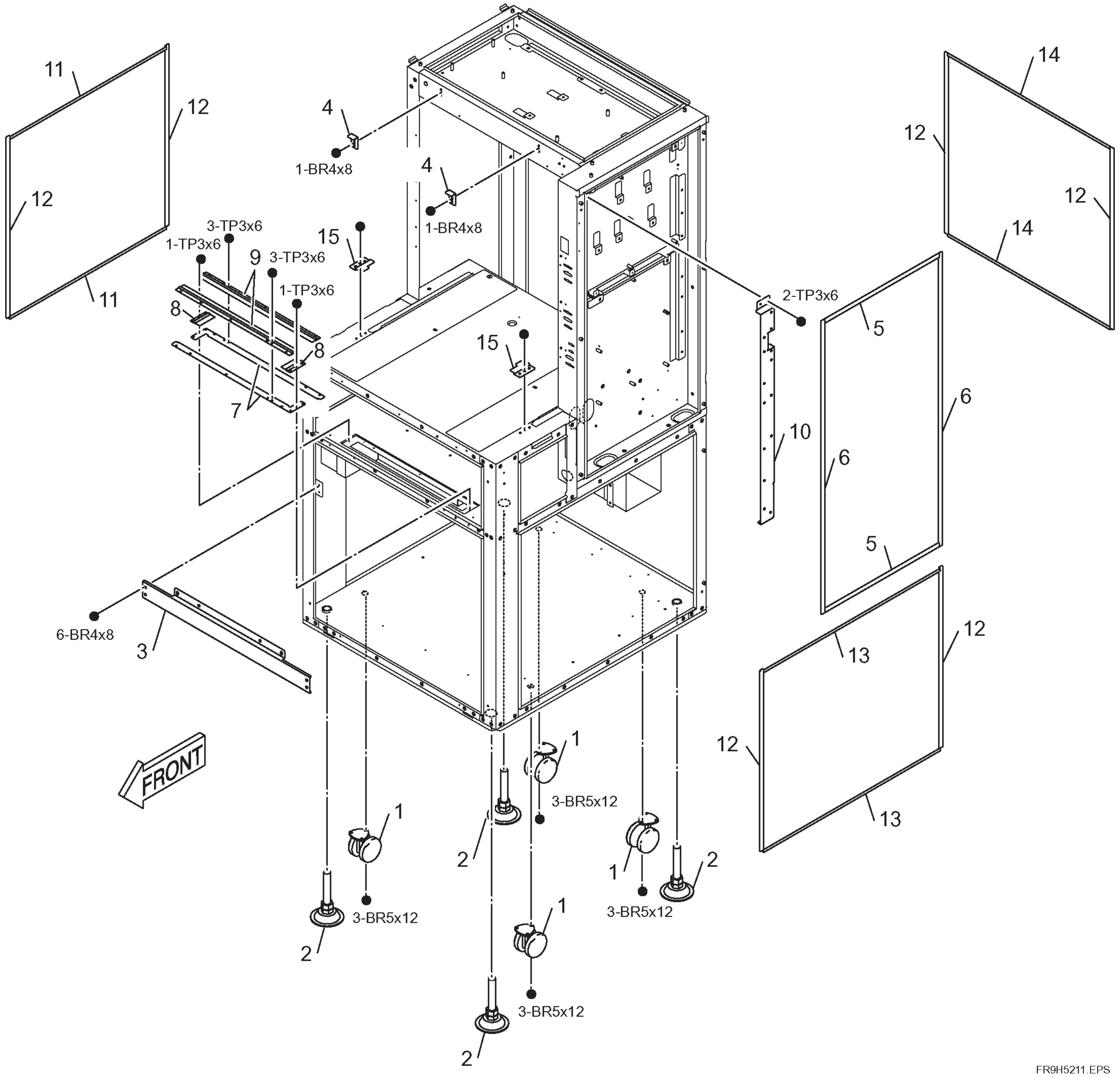
RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
E	1	350Y101183A	カバー	Cover	1			☞{MC:3.1}
E	2	350Y101144	カバー	Cover	1			☞{MC:3.1}
	3	***						
E	4	350Y101177A	カバー	Cover	1			☞{MC:3.1}
	5	***						
	6	***						
	7	***						
E	8	350N100941A	カバー	Cover	1			–
D	9	376N100047	メカニカルフィルタ	Mechanical Filter	2			☞{MC:3.2}
	10	***						
D	11	345N100520B	ルーバ	Louver	2			☞{MC:3.2}
E	12	350Y101146	カバー	Cover	1			☞{MC:3.1}
E	13	350Y101179A	カバー	Cover	1			☞{MC:3.1}
E	14	350Y101140	カバー	Cover	1			☞{MC:3.1}





02A フレーム 1 FRAME 1


FR9H5251.EPS

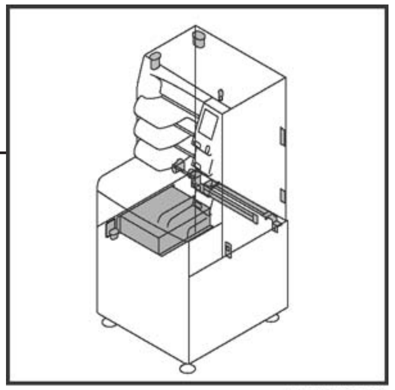

11
12
4
1-BR4x8
4
1-BR4x8
12
3-TP3x6
1-TP3x6
9
3-TP3x6
15
1-TP3x6
11
8
8
15
7
2-TP3x6
12
14
12
14
5
10
6
6
5
12
13
6-BR4x8
3
FRONT
1
3-BR5x12
12
13
1
2
2
1
3-BR5x12
1
3-BR5x12
2
3-BR5x12
2
FR9H5211.EPS

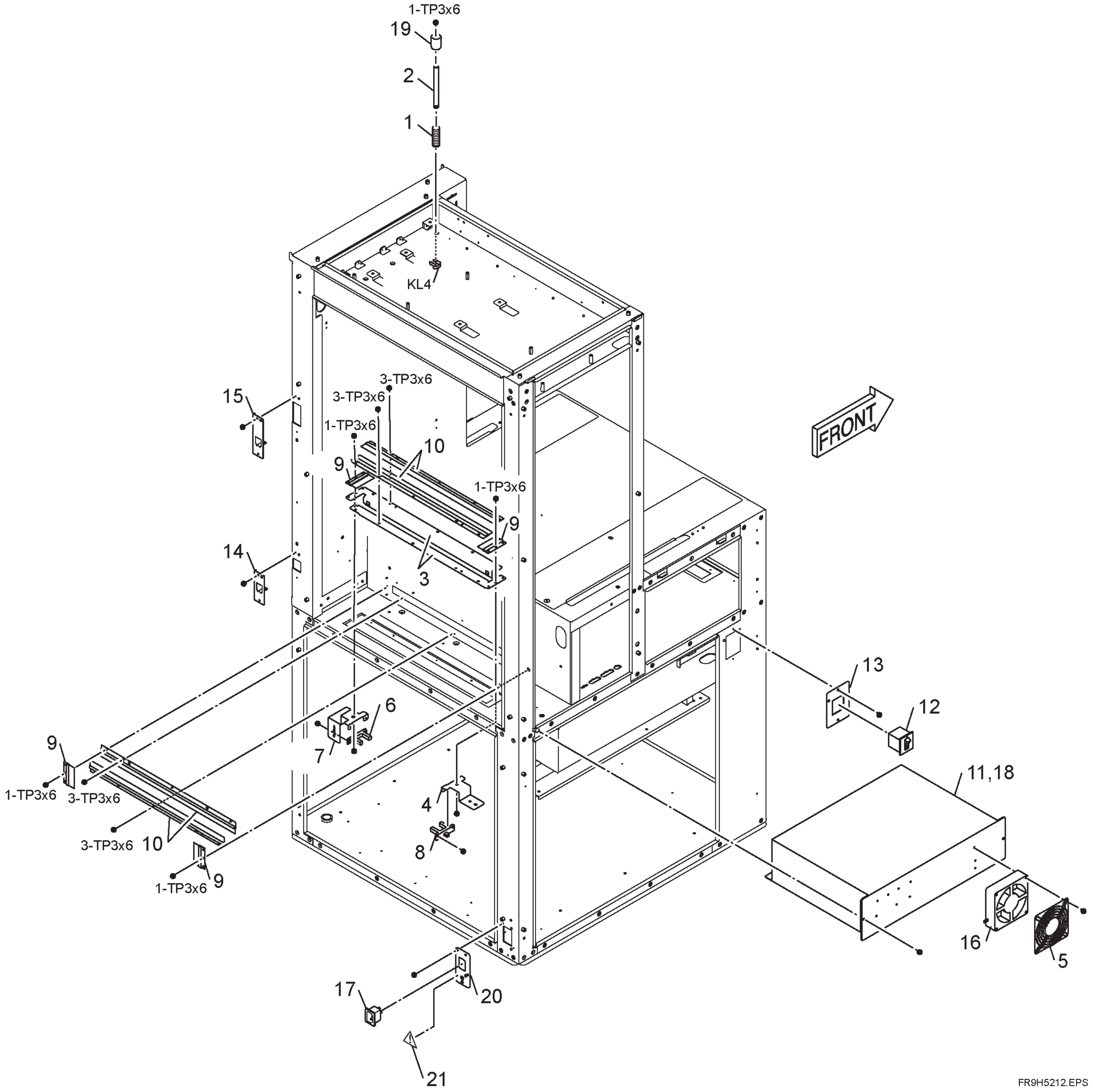
フレーム 1 FRAME 1 02A

RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
D	1.1	367N1008	キャスタ	Caster	4		*1	–
D	1.2	367S1078	キャスタ	Caster	4		*2	–
D	1.3	367N1006	キャスタ	Caster	4		*2	–
D	2	367S2059	脚	Adjuster Assembly	4			–
E	3	356N9404C	ブラケット	Bracket	1			–
E	4.1	356N9252B	ブラケット	Bracket	2		#20001or later	–
E	4.2	356N104008	ブラケット	Bracket	2		#50001or later	–
D	5.1	382N1591A	テープ	Tape	2		#20001or later	–
D	5.2	382N100359	テープ	Tape	2		#50001or later	–
D	6.1	382N1590A	テープ	Tape	2		#20001or later	–
D	6.2	382N100358	テープ	Tape	2		#50001or later	–
D	7	363Y0478A	ガイド板	Guide plate	2			–
D	8	387N0131B/C	帯電防止材	Antistatic Brush	2			–
D	9	387N0130D/E	帯電防止材	Antistatic Brush	2			–
E	10.1	350N2782B	カバー	Cover	1		#20001or later	–
E	10.2	350N101459	カバー	Cover	1		#50001or later	–
D	11	382N1623	テープ	Tape	2		#20001or later	–
D	12	382N1621	テープ	Tape	6		#20001or later	–
D	13	382N1624	テープ	Tape	2		#20001or later	–
D	14	382N1622	テープ	Tape	2		#20001or later	–
E	15	356N9202A	ブラケット	Bracket	2			☞{MC:5.2}

*1: 21211, 21213 or earlier
*2: 21212, 21214 or later

02B フレーム 2（#20001 以降） FRAME 2 (#20001 or Later)


FR9H5252.EPS

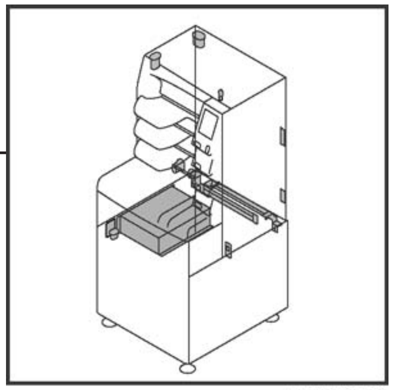

1-TP3x6
19
2
1
KL4
15
3-TP3x6
3-TP3x6
1-TP3x6
10
9
1-TP3x6
9
14
3
FRONT
13
12
6
7
9
1-TP3x6
3-TP3x6
4
11,18
3-TP3x6
10
8
1-TP3x6
9
16
5
17
20
21

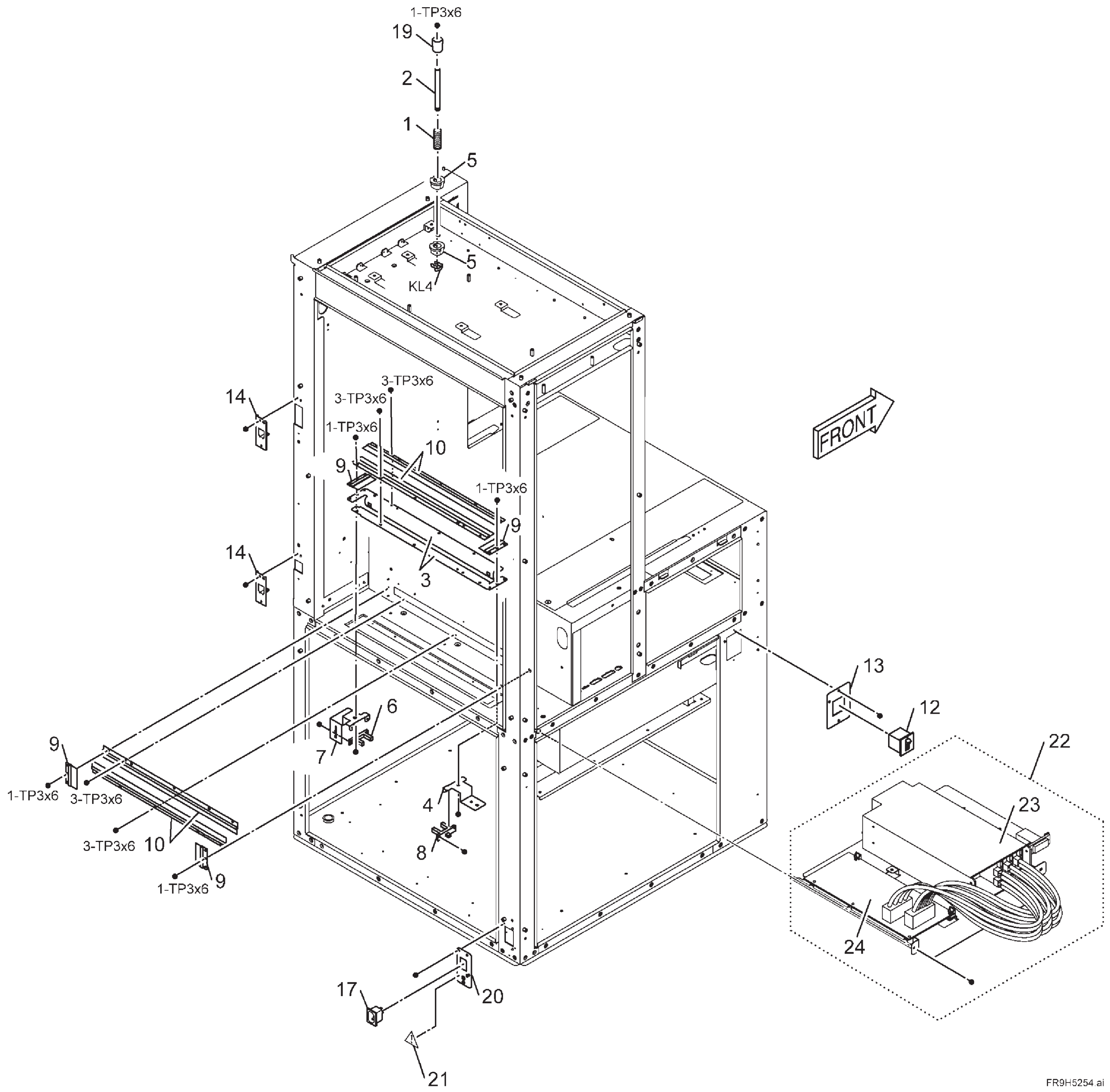
FR9H5212.EPS

フレーム 2（#20001 以降） FRAME 2 (#20001 or Later) 02B

RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
D	1	388N1211A	圧縮コイルバネ	Compression Coil Spring	1	L ≒ 25mm		☞{MC:4.13}
E	2	319N4037B	軸	Shaft	1			☞{MC:4.13}
D	3	363Y0477	ガイド板	Guide plate	2			–
E	4	356N9294B	ブラケット	Bracket	1			☞{MC:4.12}
E	5	364S0005	ガード	Guard	1			☞{MC:4.2}
D	6.1	113Y1466	ボードアセンブリ	Board Assembly	1	SG1		☞{MC:4.11}
D	6.2	146N0016B	フォトインタラプタ	Photo Sensor	1	SG1		☞{MC:4.11}
E	7	356N9295B/C	ブラケット	Bracket	1			☞{MC:4.11}
D	8.1	113Y1466	ボードアセンブリ	Board Assembly	1	SG2		☞{MC:4.12}
D	8.2	146N0016B	フォトインタラプタ	Photo Sensor	1	SG2		☞{MC:4.12}
D	9	387N0131B/C	帯電防止材	Antistatic Brush	4			–
D	10	387N0130D/E	帯電防止材	Antistatic Brush	4			–
CR	11	125N0124G/H	電源 (PSU17A)	Power Supply (PSU17A)	1			☞{MC:4.1}
D	12	128N0067/A	ブレーカ	Breaker	1			☞{MC:4.3}
C	13	352N0605A	パネル	Panel	1			☞{MC:4.3}
C	14	352N0602A/B	パネル	Panel	1			–
C	15	352N0610A/B	パネル	Panel	1			–
D	16	119S0008/A/B	電動ファン	Fan	1			☞{MC:4.2}
D	17	120S3415	ソケット	Socket	1			☞{MC:4.4}
AT	18	137S1276	ヒューズ	FUSE	1	48V/1.6A		☞{MC:14.1}
E	19	319N3999B	軸	Shaft	1			☞{MC:4.13}
C	20	352N0606C	パネル	Panel	1			☞{MC:4.4}
E	21	405N2505A	銘板	Label	1			–

02C フレーム 3（#50001 以降）FRAME 3 (#50001 or Later)

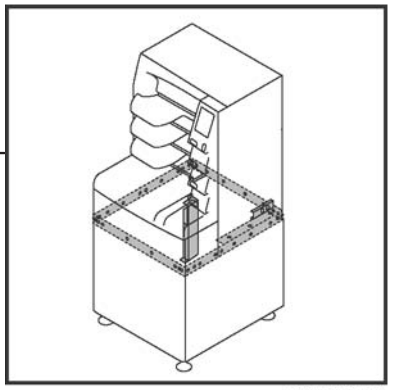

FR9H5252.EPS


1-TP3x6
19
2
1
5
5
KL4
14
3-TP3x6
3-TP3x6
1-TP3x6
10
9
1-TP3x6
9
14
3
FRONT
13
12
6
9
7
22
23
4
1-TP3x6
3-TP3x6
3-TP3x6
10
8
9
1-TP3x6
24
17
20
21
FR9H5254.ai

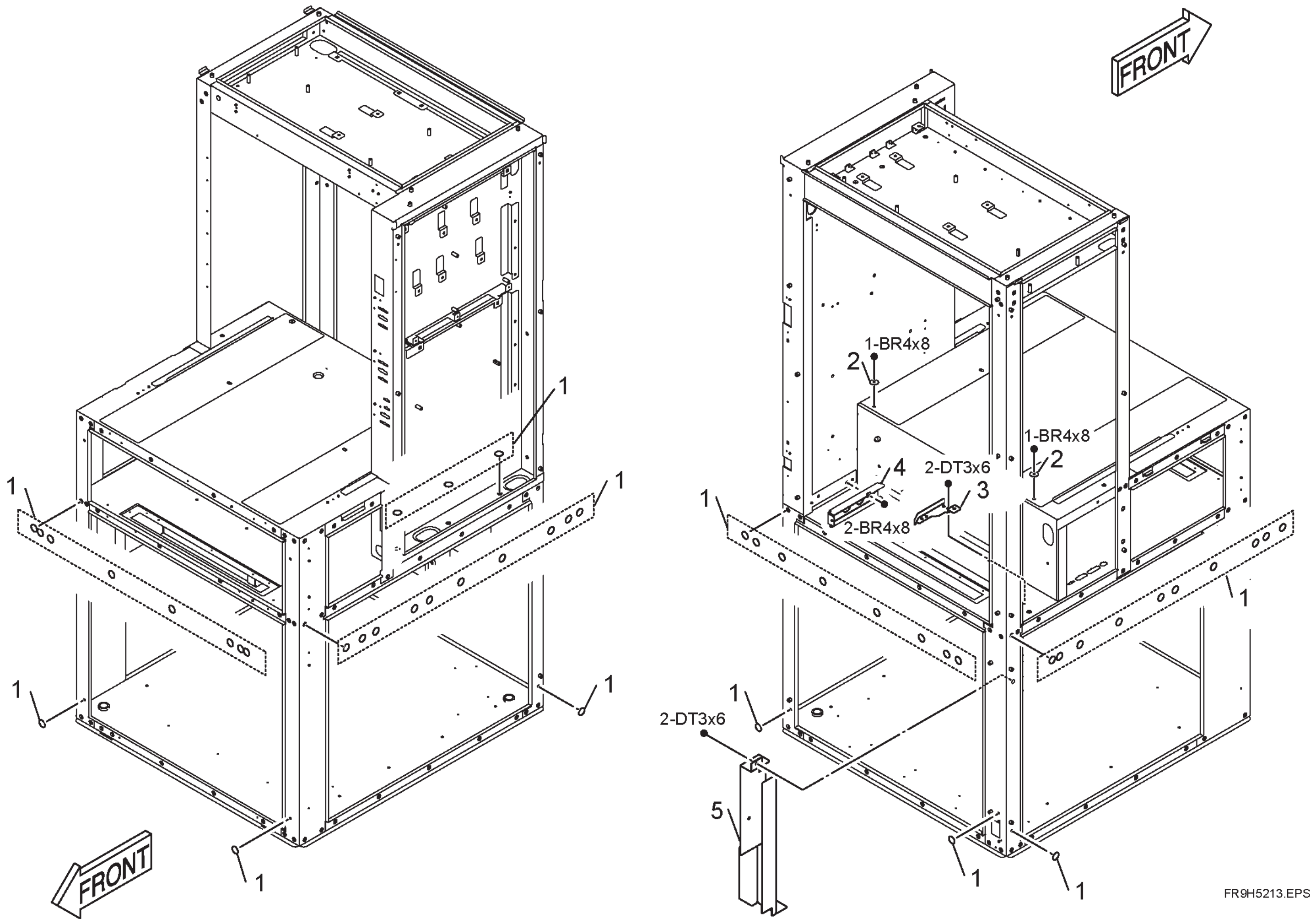
02C フレーム 3（#50001 以降）FRAME 3 (#50001 or Later)

RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
D	1	388N1211A	圧縮コイルバネ	Compression Coil Spring	1	L ≒ 25mm		☞{MC:4.13}
E	2	319N101426	軸	Shaft	1			☞{MC:4.13}
D	3	363Y0477	ガイド板	Guide plate	2			–
E	4	356N9294B	ブラケット	Bracket	1			☞{MC:4.12}
E	5	322SY322	すべり軸受	Plain Bearing	2			☞{MC:4.2}
D	6	146N0016B	フォトインタラプタ	Photo Sensor	1	SG1		☞{MC:4.11}
E	7	356N9295B/C	ブラケット	Bracket	1			☞{MC:4.11}
D	8	146N0016B	フォトインタラプタ	Photo Sensor	1	SG2		☞{MC:4.12}
D	9	387N0131B/C	帯電防止材	Antistatic Brush	4			–
D	10	387N0130D/E	帯電防止材	Antistatic Brush	4			–
	11	***						
D	12	128S0993A	ブレーカ	Breaker	1			☞{MC:4.3}
C	13	352N100256	パネル	Panel	1			☞{MC:4.3}
C	14	352N0602A/B	パネル	Panel	2			–
	15	***						
	16	***						
D	17	120N100014	レセプタクル		1			☞{MC:4.4}
	18	***						
E	19	319N3999B	軸	Shaft	1			☞{MC:4.13}
C	20	352N100272	パネル	Panel	1			☞{MC:4.4}
E	21	405N2505A	銘板	Label	1			–
C	22	813Y100047	電源ユニットアセンブリ	Power Supply Unit Assembly	1			☞{MC:4.14}
CR	23	125Y100037	電源アセンブリ	Power Supply Assembly	1			☞{MC:4.15}
C	24	113Y100415A	ボードアセンブリ (PSU29A)	Board Assembly (PSU29A)	1			☞{MC:4.16}

02D フレーム 4 FRAME 4



FR9H5253.EPS


FRONT
1
1
1
1
1
1
FRONT
2
1-BR4x8
1-BR4x8
2
4
2-DT3x6
3
2-BR4x8
1
1
1
2-DT3x6
1
5
1
1

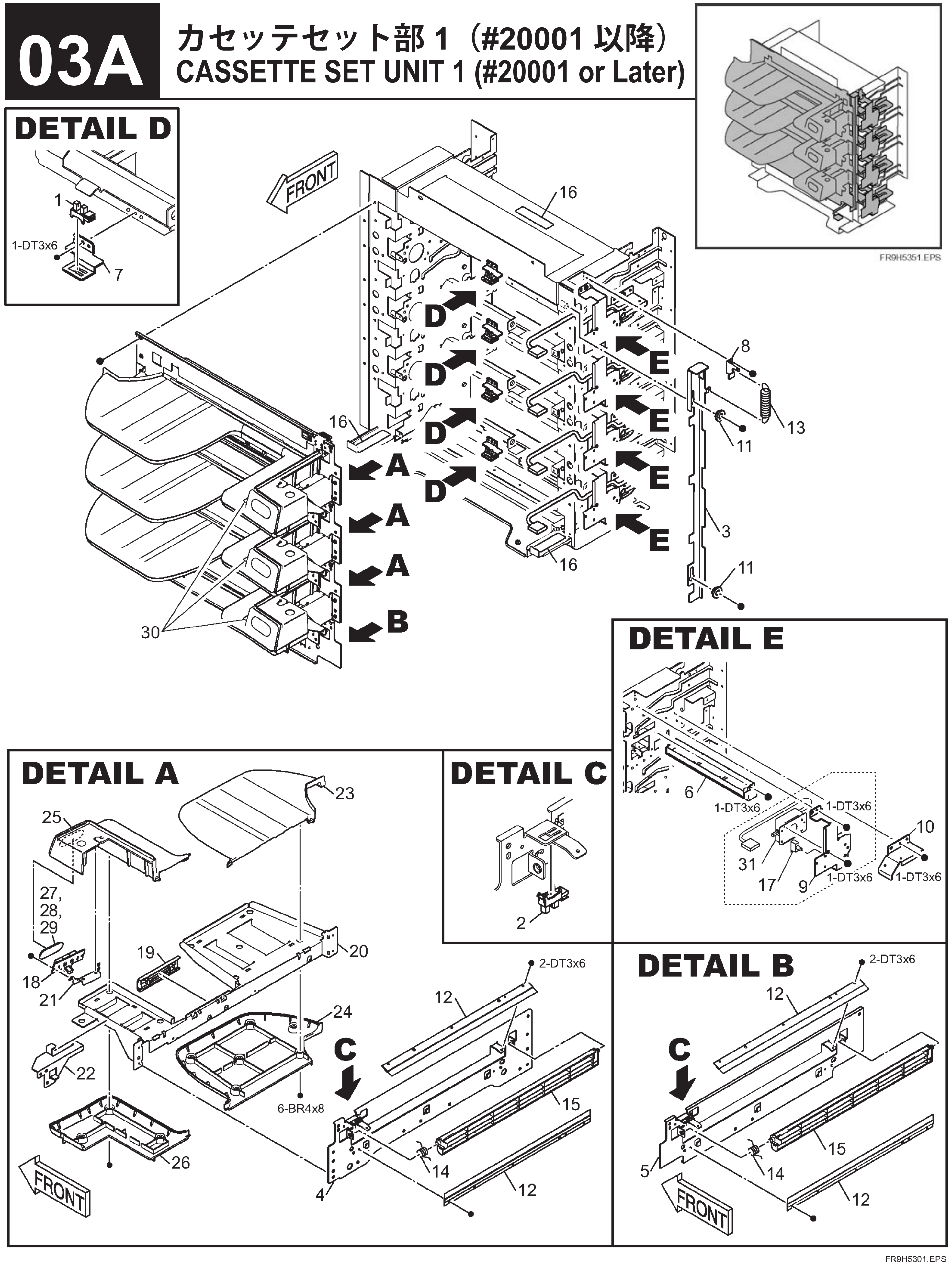
FR9H5213.EPS

フレーム 4 FRAME 4 02D

RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
E	1	375N0099	シール	Seal	38	*1		–
E	2	347N1841B	スペーサ	Spacer	2			–
E	3	356N9222B	ブラケット	Bracket	1		#20001 or later	–
E	4	356N9187A	ブラケット	Bracket	1			–
E	5.1	350N2725D	カバー	Cover	1		#20001 or later	–
E	5.2	350Y101191	カバー	Cover	1		#50001 or later	–

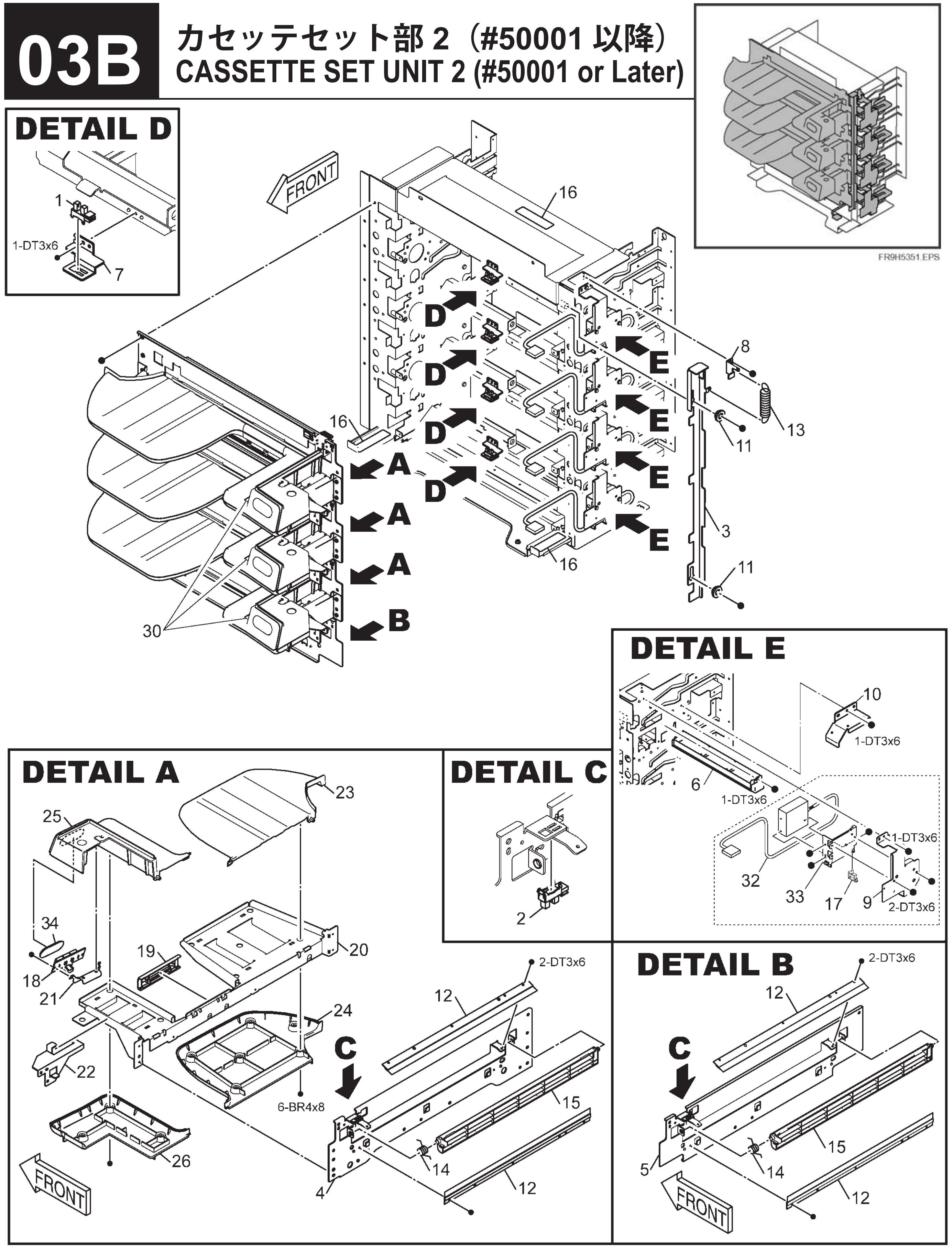
*1 : #50001 or later: QTY.38
#20001 or later: QTY.45

03A カセッテセット部 1（#20001 以降）
CASSETTE SET UNIT 1 (#20001 or Later)


FR9H5351.EPS
DETAIL D
1
1-DT3x6
7
FRONT
16
8
13
11
3
11
16
16
D
D
D
D
E
E
E
E
A
A
A
B
30
DETAIL E
6
1-DT3x6
1-DT3x6
10
31
17
9
1-DT3x6
1-DT3x6
DETAIL A
23
25
27,
28,
29
19
20
18
21
24
22
26
6-BR4x8
FRONT
C
2-DT3x6
12
15
14
12
4
DETAIL C
2
DETAIL B
2-DT3x6
12
C
15
14
12
5
FRONT
FR9H5301.EPS

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	146S0029/A	ホトインタラプタ	Photo Sensor	4	SA6, 12, 18, 24		☞{MC:5.27}
D	2	146S0029/A	ホトインタラプタ	Photo Sensor	4	SA1, 7, 13, 19		☞{MC:5.17}
E	3	341N1104	アーム	Arm	1			☞{MC:5.14}
E	4	345N1668D	遮板	Light Protect Plate	3			☞{MC:5.7}
E	5	345N1669C	遮板	Light Protect Plate	1			☞{MC:5.5}
E	6	350N2706B	カバー	Cover	4			☞{MC:5.13}
E	7	356N9445	ブラケット	Bracket	4			–
E	8	356N9233	ブラケット	Bracket	1			☞{MC:5.14}
E	9	356N9388A	ブラケット	Bracket	4			☞{MC:5.12}
E	10	356N9408	ブラケット	Bracket	4			☞{MC:5.12}
D	11	363N2499	ガイド	Guide	2			☞{MC:5.14}
D	12	387N0130D/E	帯電防止材	Antistatic Brush	8			☞{MC:5.10}
D	13	388N2447B	引張りコイルバネ	Extension Spring	1	L ≒ 33mm		☞{MC:5.14}
D	14	388N3081B	ねじりコイルバネ	Torsion Coil Spring	4			☞{MC:5.7}
D	15	398N0067C	シャッタ	Shutter	4			☞{MC:5.7}
E	16	405N0186	銘板	Label	3			☞{MC:5.1}
D	17	318S1164	ブッシュ	Clump	4			–
D	18	113Y1702C	ボードアセンブリ	Board Assembly	3	LED1, 2, 3		☞{MC:5.8}
E	19	350N2785C	カバー	Cover	3		#20001 or later	☞{MC:5.8}
E	20	356N9161D	ブラケット	Bracket	3			☞{MC:5.8}
E	21	356N9255B	ブラケット	Bracket	3			☞{MC:5.8}
E	22	356N9368B	ブラケット	Bracket	3			☞{MC:5.8}
E	23	357N1466A	台	Base	3		#20001 or later	☞{MC:5.8}
E	24	357N1467A	台	Base	3		#20001 or later	☞{MC:5.8}
E	25	357N1479A	台	Base	3		#20001 or later	☞{MC:5.8}
E	26	357N1480B	台	Base	3		#20001 or later	☞{MC:5.8}
A	27	603Y0061A	フィルタ	Filter	1	NO1	#20001 or later	☞{MC:5.8}
A	28	603Y0062A	フィルタ	Filter	1	NO2	#20001 or later	☞{MC:5.8}
A	29	603Y0063B	フィルタ	Filter	1	NO3	#20001 or later	☞{MC:5.8}
E	30	405N3060A	銘板	Label	3		#20001 or later	–
D	31	852Y0074/A/B	読取部	Bar Code Reader	4	BCRA1, 2, 3, 4	#20001 or later	☞{MC:5.12}

03B カセッテセット部 2（#50001 以降） CASSETTE SET UNIT 2 (#50001 or Later)


FR9H5351.EPS
DETAIL D
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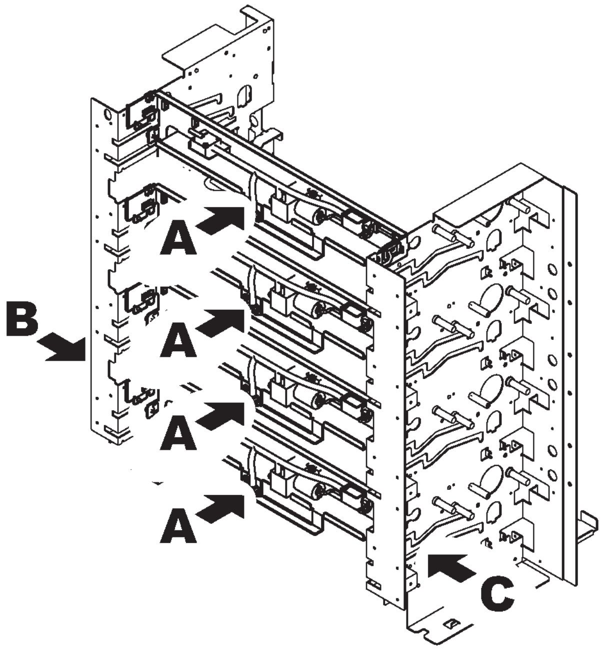
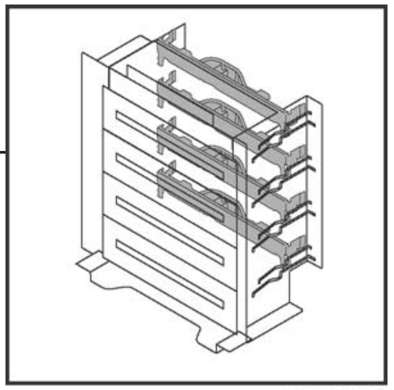
1-DT3x6
7
FRONT
16
D
D
D
D
E
E
E
E
8
13
11
3
11
16
A
A
A
B
30
DETAIL E
10
1-DT3x6
6
1-DT3x6
1-DT3x6
32
33
17
9
2-DT3x6
DETAIL A
23
25
34
19
20
18
21
24
22
26
FRONT
6-BR4x8
C
2-DT3x6
12
15
14
12
4
DETAIL C
2
DETAIL B
2-DT3x6
12
C
15
14
12
5
FRONT
FR9H5301b.ai

カセッテセット部 2（#50001 以降）
CASSETTE SET UNIT 2 (#50001 or Later)
03B

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	146S0029/A	ホトインタラプタ	Photo Sensor	4	SA6, 12, 18, 24		☞{MC:5.27}
D	2	146S0029/A	ホトインタラプタ	Photo Sensor	4	SA1, 7, 13, 19		☞{MC:5.17}
E	3	341N1104	アーム	Arm	1			☞{MC:5.14}
E	4	345N1668D	遮板	Light Protect Plate	3			☞{MC:5.7}
E	5	345N1669C	遮板	Light Protect Plate	1			☞{MC:5.5}
E	6	350N2706B	カバー	Cover	4			☞{MC:5.13}
E	7	356N9445	ブラケット	Bracket	4			–
E	8	356N9233	ブラケット	Bracket	1			☞{MC:5.14}
E	9	356N9388A	ブラケット	Bracket	4			☞{MC:5.12}
E	10	356N9408	ブラケット	Bracket	4			☞{MC:5.12}
D	11	363N2499	ガイド	Guide	2			☞{MC:5.14}
D	12	387N0130D/E	帯電防止材	Antistatic Brush	8			☞{MC:5.10}
D	13	388N2447B	引張りコイルバネ	Extension Spring	1	L ≒ 33mm		☞{MC:5.14}
D	14	388N3081B	ねじりコイルバネ	Torsion Coil Spring	4			☞{MC:5.7}
D	15	398N0067C	シャッタ	Shutter	4			☞{MC:5.7}
E	16	405N0186	銘板	Label	3			☞{MC:5.1}
D	17	318S1164	ブッシュ	Clump	4			–
D	18	113Y1702C	ボードアセンブリ	Board Assembly	3	LED1, 2, 3		☞{MC:5.8}
E	19	350N101546	カバー	Cover	3		#50001 or later	☞{MC:5.8}
E	20	356N9161D	ブラケット	Bracket	3			☞{MC:5.8}
E	21	356N9255B	ブラケット	Bracket	3			☞{MC:5.8}
E	22	356N9368B	ブラケット	Bracket	3			☞{MC:5.8}
E	23	357N100602	台	Base	3		#50001 or later	☞{MC:5.8}
E	24	357N100603	台	Base	3		#50001 or later	☞{MC:5.8}
E	25	357N100604	台	Base	3		#50001 or later	☞{MC:5.8}
E	26	357N100605	台	Base	3		#50001 or later	☞{MC:5.8}
	27	***						
	28	***						
	29	***						
E	30	405N101759	銘板	Label	3		#50001 or later	–
	31	***						
D	32	852N100004A	読取部	Bar Code Reader	4	BCRA1, 2, 3, 4	#50001 or later	☞{MC:5.12}
E	33	356N103848A	ブラケット	Bracket	4		#50001 or later	☞{MC:5.12}
A	34	603Y0090	フィルタ	Filter	4		#50001 or later	☞{MC:5.8}

03C カセッテセット部 3（#20001 以降） CASSETTE SET UNIT 3 (#20001 or Later)





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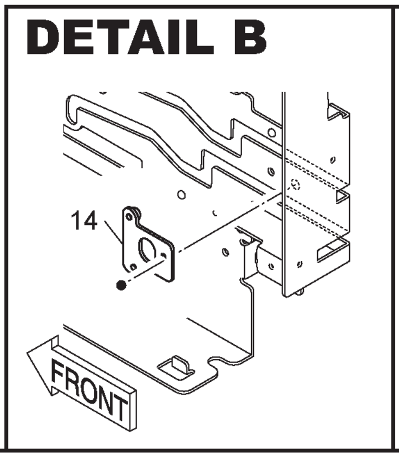
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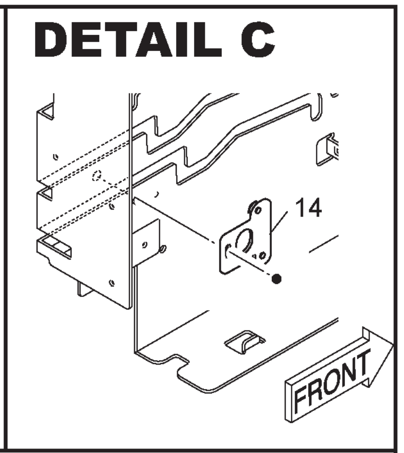
14
FRONT


DETAIL C
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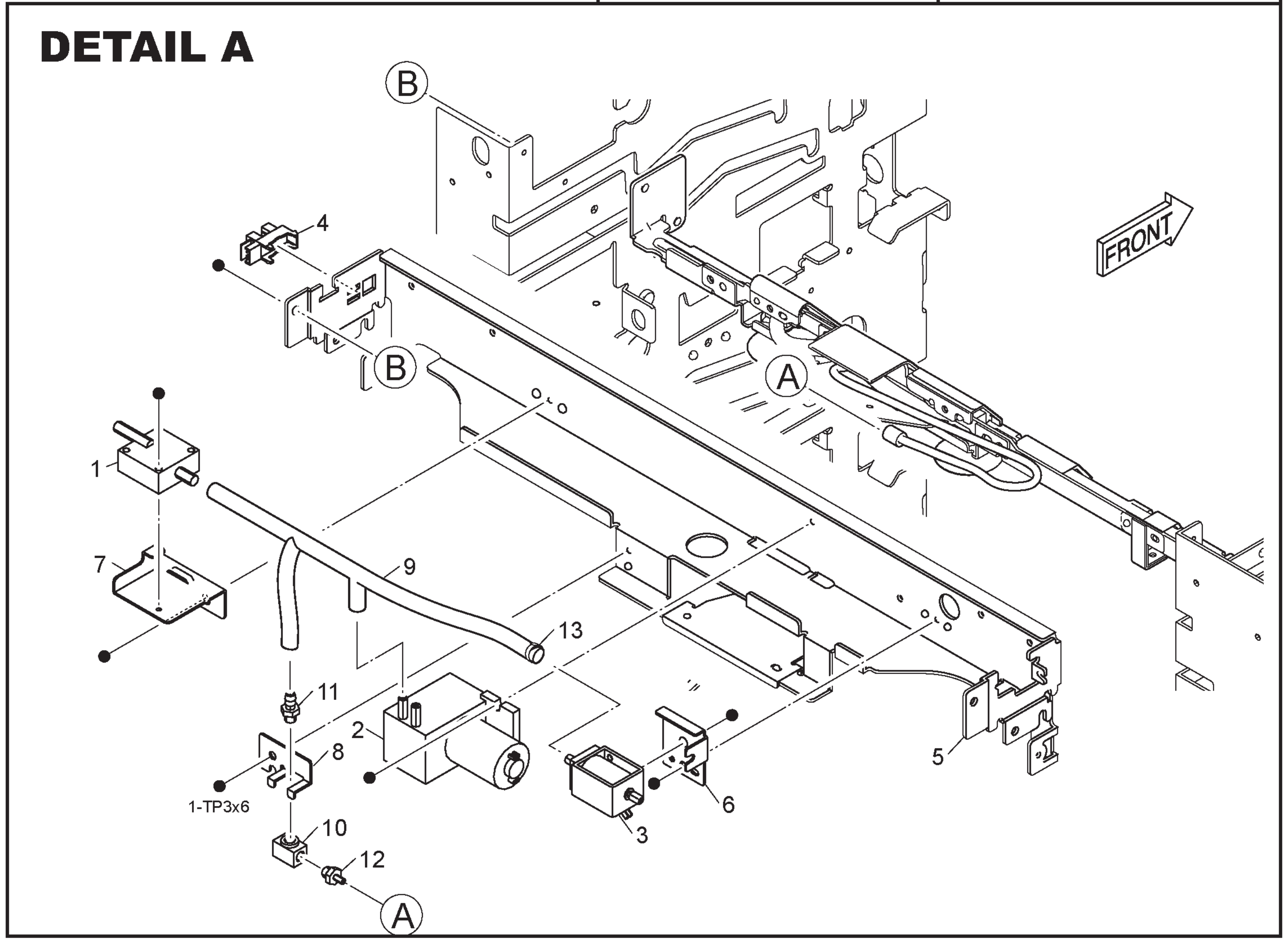
FRONT

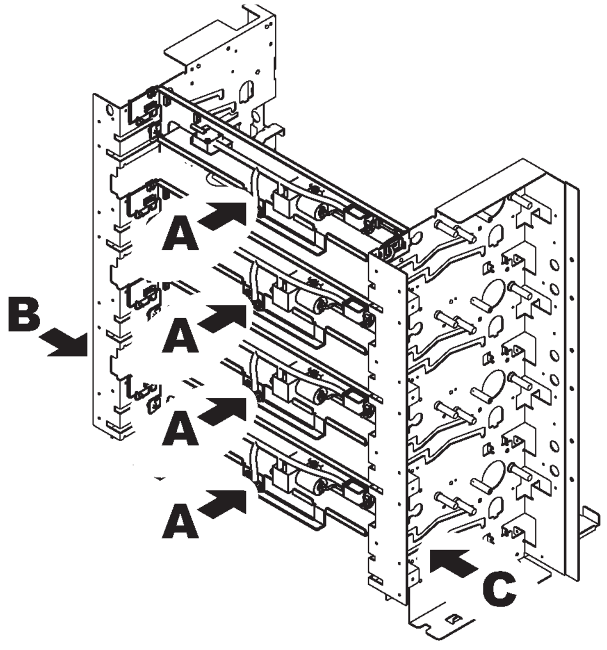

DETAIL A
B
4
B
A
FRONT
1
7
9
13
11
2
8
1-TP3x6
10
12
A
3
6
5

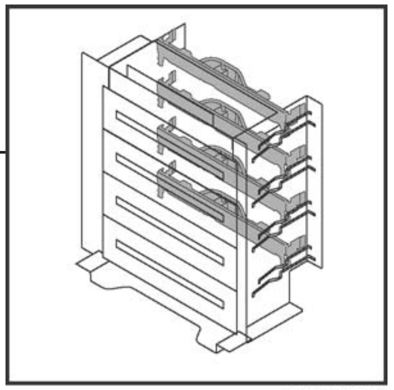
FR9H5304.ai

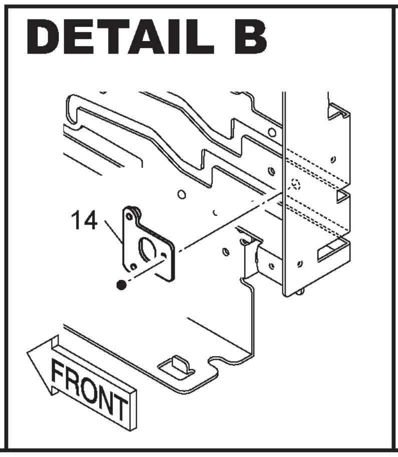
カセッテセット部 3（#20001 以降）
CASSETTE SET UNIT 3 (#20001 or Later) 03C

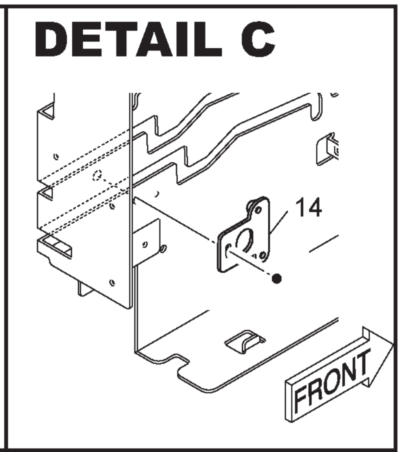
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	128S0392	スイッチ	Switch	4	SA5, 11, 17, 23		☞{MC:5.20}
A	2	133Y1031A/B	電動ポンプ	Pump	4	PA1, 2, 3, 4		☞{MC:5.36}
D	3	134Y0056B/C	電磁バルブ	Solenoid Valve	4	SVA1, 2, 3, 4		☞{MC:5.35}
D	4	146S0029/A	ホトインタラプタ	Photo Sensor	4	SA4, 10, 16, 22		☞{MC:5.19}
E	5	346N1260F	補助板	Plate Support	4			☞{MC:5.31}
E	6	356N8168A	ブラケット	Bracket	4			☞{MC:5.35}
E	7	356N9149C	ブラケット	Bracket	4			☞{MC:5.20}
E	8	356N9150A	ブラケット	Bracket	4			☞{MC:5.15}
D	9	370N0395B	ホース	Hose	4			☞{MC:5.15}
D	10	372S0049/A	管継手	Joint	4			☞{MC:5.15}
D	11	372S0050/A	管継手	Joint	4			☞{MC:5.15}
D	12	372S0053/A	管継手	Joint	4			☞{MC:5.15}
D	13	316S2080	止め具	Clamp	4			☞{MC:5.35}
E	14	356N9569	ブラケット	Bracket	2			☞{MC:5.43}

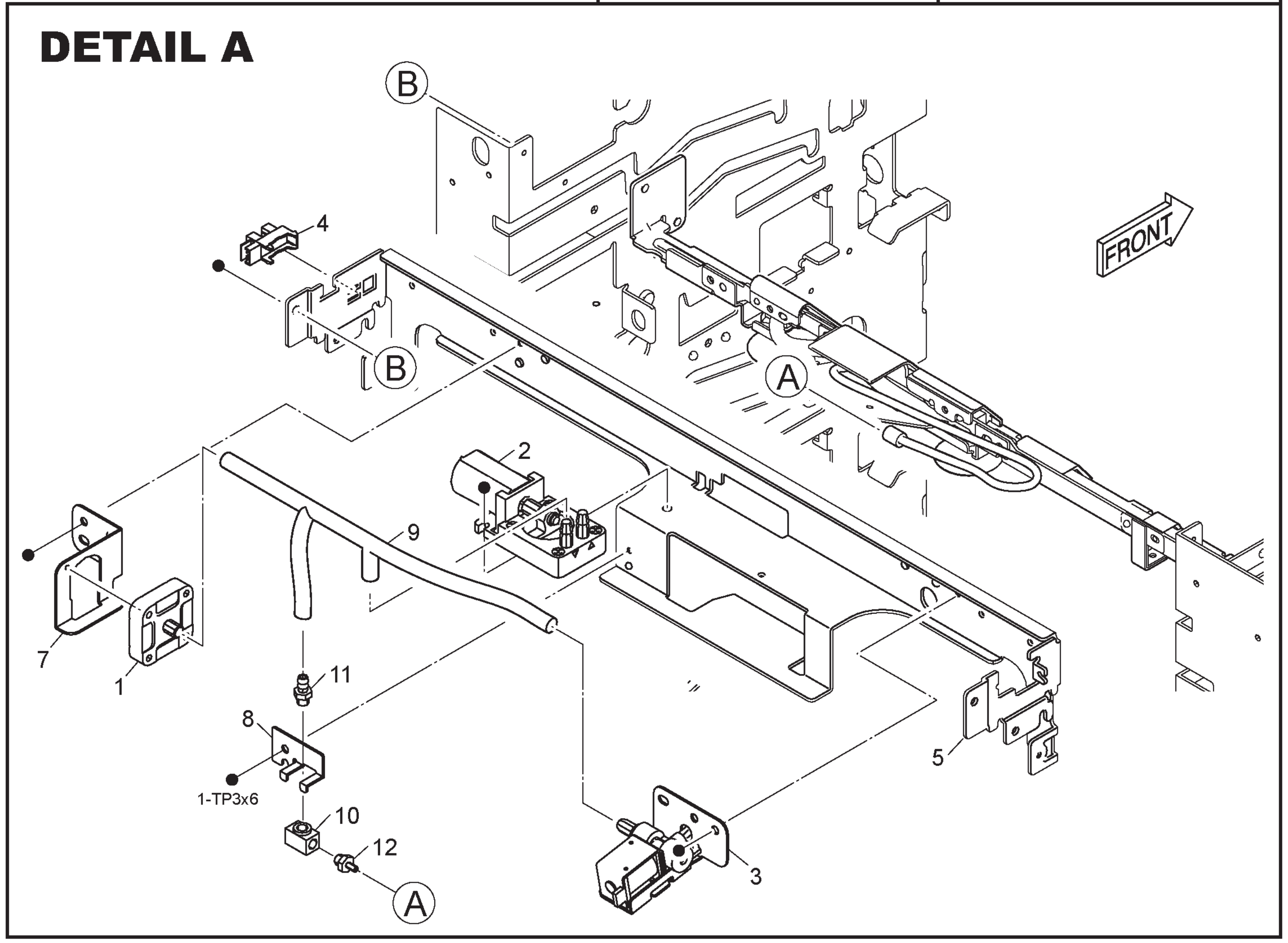
03D カセッテセット部 4（#50001 以降） CASSETTE SET UNIT 4 (#50001 or Later)




FR9H5352.EPS


DETAIL B
14
FRONT


DETAIL C
14
FRONT

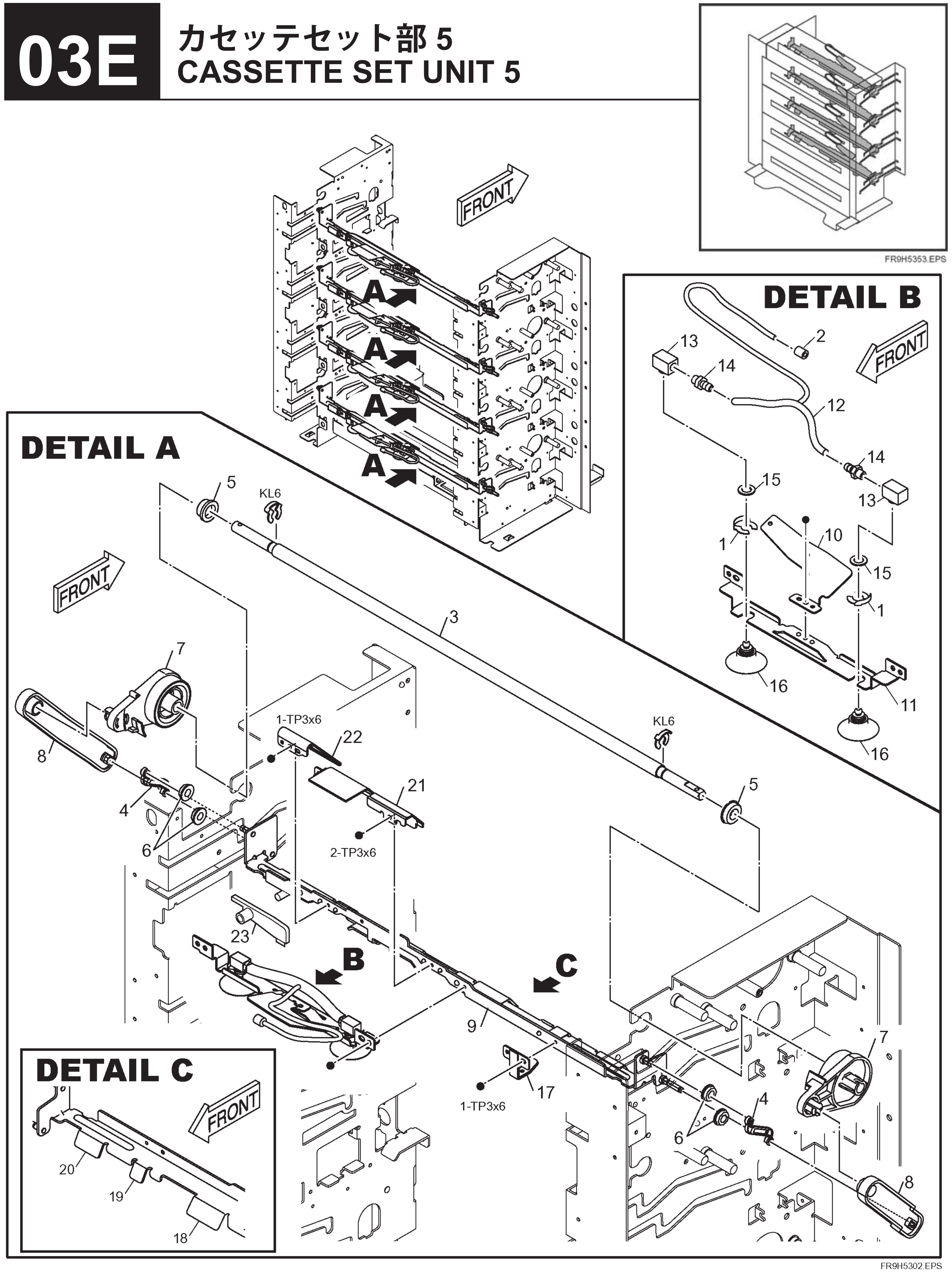

DETAIL A
B
4
B
A
FRONT
2
9
7
1
11
8
1-TP3x6
10
12
A
5
3

FR9H5356.ai

カセッテセット部 4（#50001 以降） CASSETTE SET UNIT 4 (#50001 or Later) 03D

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	128Y0331	スイッチ	Switch	4	SA5, 11, 17, 23		☞{MC:5.20}
A	2	133Y2034C	電動ポンプ	Pump	4	PA1, 2, 3, 4		☞{MC:5.36}
D	3	134Y100048A	電磁バルブ	Solenoid Valve	4	SVA1, 2, 3, 4		☞{MC:5.35}
D	4	146S0029/A	ホトインタラプタ	Photo Sensor	4	SA4, 10, 16, 22		☞{MC:5.19}
E	5	346N100533B	補助板	Plate Support	4			☞{MC:5.31}
	6	***						
E	7	356N103836A	ブラケット	Bracket	4			☞{MC:5.20}
E	8	356N9150A	ブラケット	Bracket	4			☞{MC:5.15}
D	9	370N0395B	ホース	Hose	4			☞{MC:5.15}
D	10	372S0049/A	管継手	Joint	4			☞{MC:5.15}
D	11	372S0050/A	管継手	Joint	4			☞{MC:5.15}
D	12	372S0053/A	管継手	Joint	4			☞{MC:5.15}
	13	***						
E	14	356N9569	ブラケット	Bracket	2			☞{MC:5.43}

03E カセッテセット部 5
CASSETTE SET UNIT 5


FR9H5353.EPS
FRONT
A
A
A
A
DETAIL A
DETAIL B
DETAIL C
FRONT
1
2
3
4
5
6
7
8
9
10
11
12
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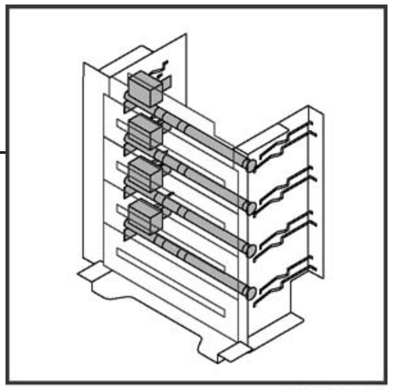
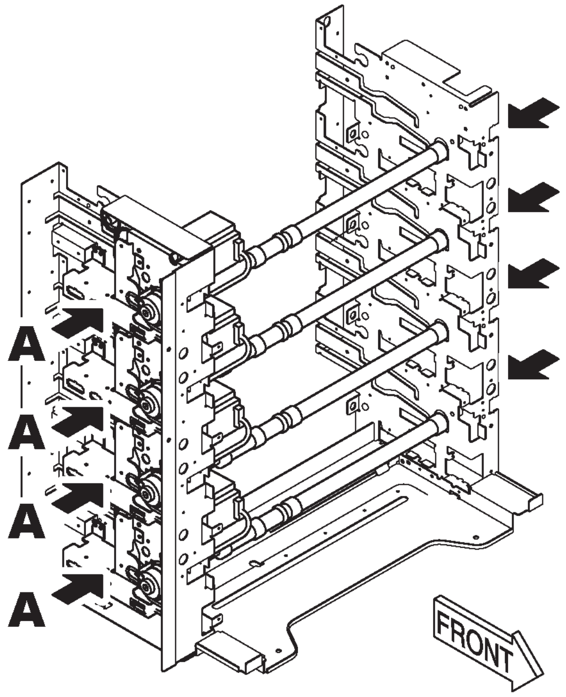
14
15
16
17
18
19
20
21
22
23
KL6
1-TP3x6
2-TP3x6
B
C
FR9H5302.EPS

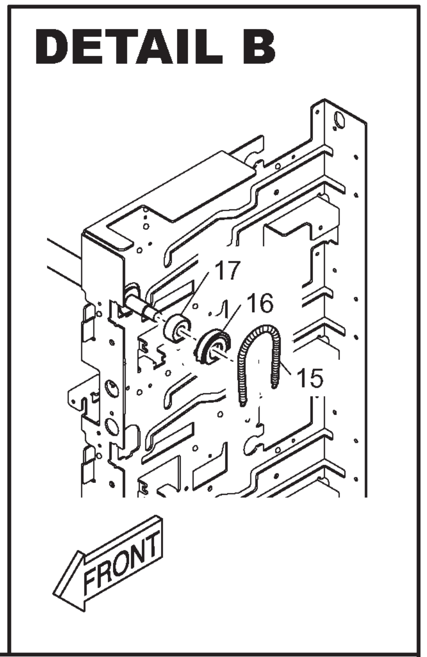
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	315N0011	止め輪	Snap Ring	8			☞{MC:5.22}
E	2	316S0146	止め具	Clamp	4			☞{MC:5.21}
E	3	319N3918	軸	Shaft	4			☞{MC:5.33}
D	4	322N0037D	すべり軸受	Plain Bearing	8			☞{MC:5.32}
D	5	322SF149	軸受	Bearing	8			☞{MC:5.33}
D	6	322SF178	軸受	Bearing	16			☞{MC:5.32}
D	7	327N1103610D	平歯車	Spur Gear	8			☞{MC:5.33}
E	8	341N0937B	アーム	Arm	8			☞{MC:5.6}
E	9	341N1060M	アーム	Arm	4			☞{MC:5.32}
E	10	356N9464	ブラケット	Bracket	4			☞{MC:5.22}
E	11	356N9151E	ブラケット	Bracket	4			☞{MC:5.22}
D	12	370N0255B	ホース	Hose	4			☞{MC:5.22}
D	13	372S0049/A	管継手	Joint	8			☞{MC:5.22}
D	14	372S0050/A	管継手	Joint	8			☞{MC:5.22}
A	15	375S0040	パッキン	Packing	8			☞{MC:5.22}
A	16	392N0009A	吸着盤	Suction Cup	8			☞{MC:5.22}
E	17	356N9477B/C	ブラケット	Bracket	4			☞{MC:5.41}
D	18	384N0081A	テープ	Tape	4			☞{MC:5.40}
D	19	384N0082	テープ	Tape	4			☞{MC:5.40}
D	20	384N0083	テープ	Tape	4			☞{MC:5.40}
E	21.1	356Y0303B	ブラケット	Bracket	4		#20001 or later	☞{MC:5.41}
E	21.2	356N103901	ブラケット	Bracket	4		#50001 or later	☞{MC:5.41}
E	22.1	356Y0302B	ブラケット	Bracket	4		#20001 or later	☞{MC:5.41}
E	22.2	356N103902	ブラケット	Bracket	4		#50001 or later	☞{MC:5.41}
E	23	341N1117	アーム	Arm	4			☞{MC:5.42}

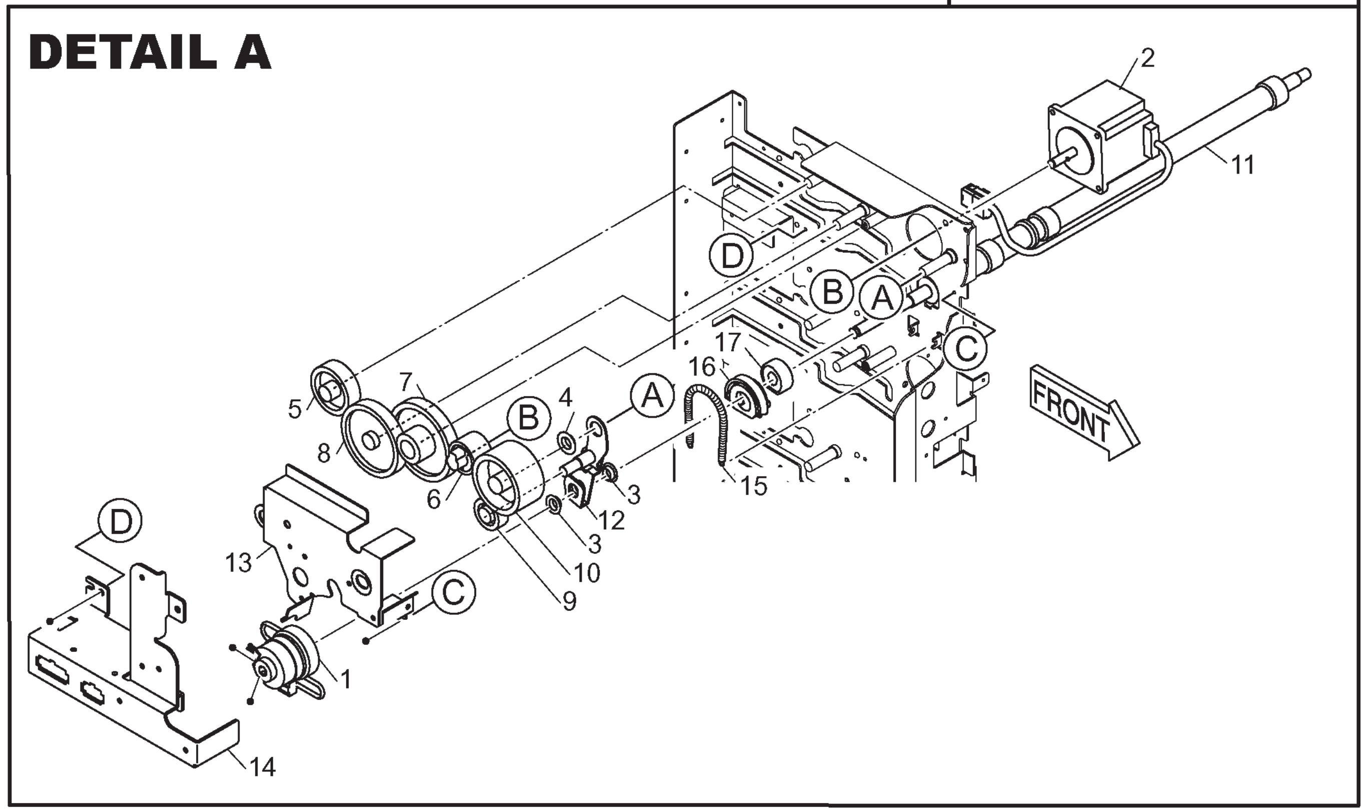
03F カセッテセット部 6 CASSETTE SET UNIT 6



FR9H5354.EPS





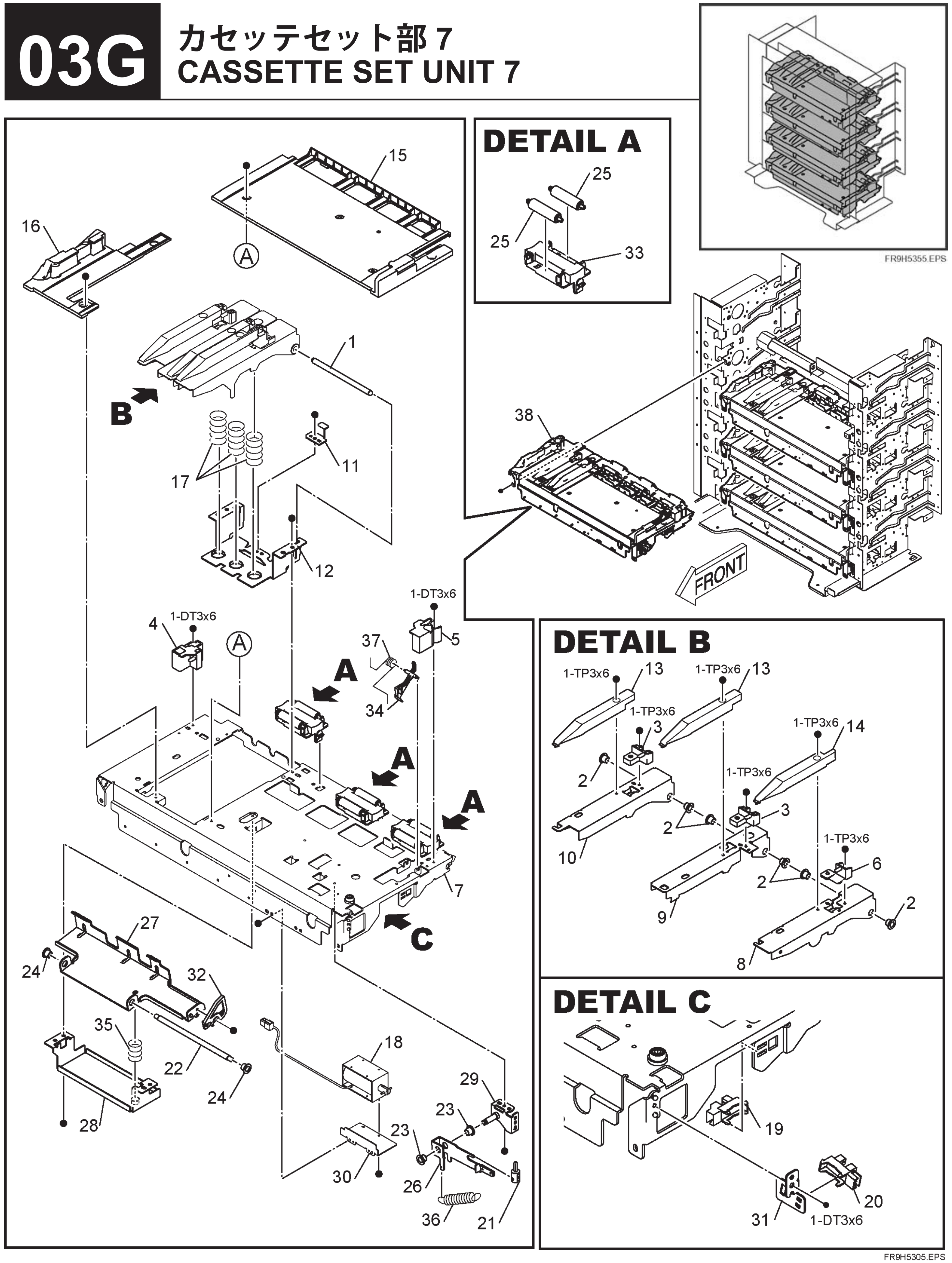


FR9H5303.EPS

カセッテセット部 6 CASSETTE SET UNIT 6 03F

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	106Y0005B/C	電磁クラッチ	Electromagnetic Clutch	4	CLA1, 2, 3, 4		☞{MC:5.16}
D	2	118SX167/A	パルスモータ	Stepping Motor	4	MA1, 2, 3, 4		☞{MC:5.11}
D	3	322N0038A	すべり軸受	Plain Bearing	8			☞{MC:5.24}
D	4	322SY065	すべり軸受	Plain Bearing	4			☞{MC:5.24}
D	5	327N0144A	平歯車	Spur Gear	4			☞{MC:5.24}
D	6	327N0173A	平歯車	Spur Gear	4			☞{MC:5.24}
D	7	327N0193A	平歯車	Spur Gear	4			☞{MC:5.24}
D	8	327N0194	平歯車	Spur Gear	4			☞{MC:5.24}
D	9	327N1101904	平歯車	Spur Gear	4			☞{MC:5.24}
D	10	327N1103802	平歯車	Spur Gear	4			☞{MC:5.24}
D	11	334N0063A	ローラ	Roller	4			☞{MC:5.24}
E	12	356N6831C	ブラケット	Bracket	4			☞{MC:5.24}
E	13	356N9142B	ブラケット	Bracket	4			☞{MC:5.24}
E	14	356N9248	ブラケット	Bracket	4			☞{MC:5.24}
D	15	388N2485A	引張りコイルバネ	Extension Spring	8	L ≒ 106mm		☞{MC:5.24}
D	16	360N0360A	ハウジング	Housing	8			☞{MC:5.24}
D	17	360N0363	ハウジング	Housing	8			☞{MC:5.24}

03G カセッテセット部 7
CASSETTE SET UNIT 7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12
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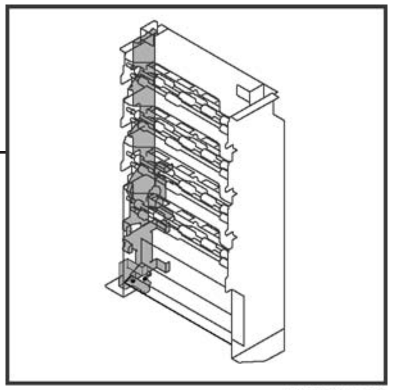
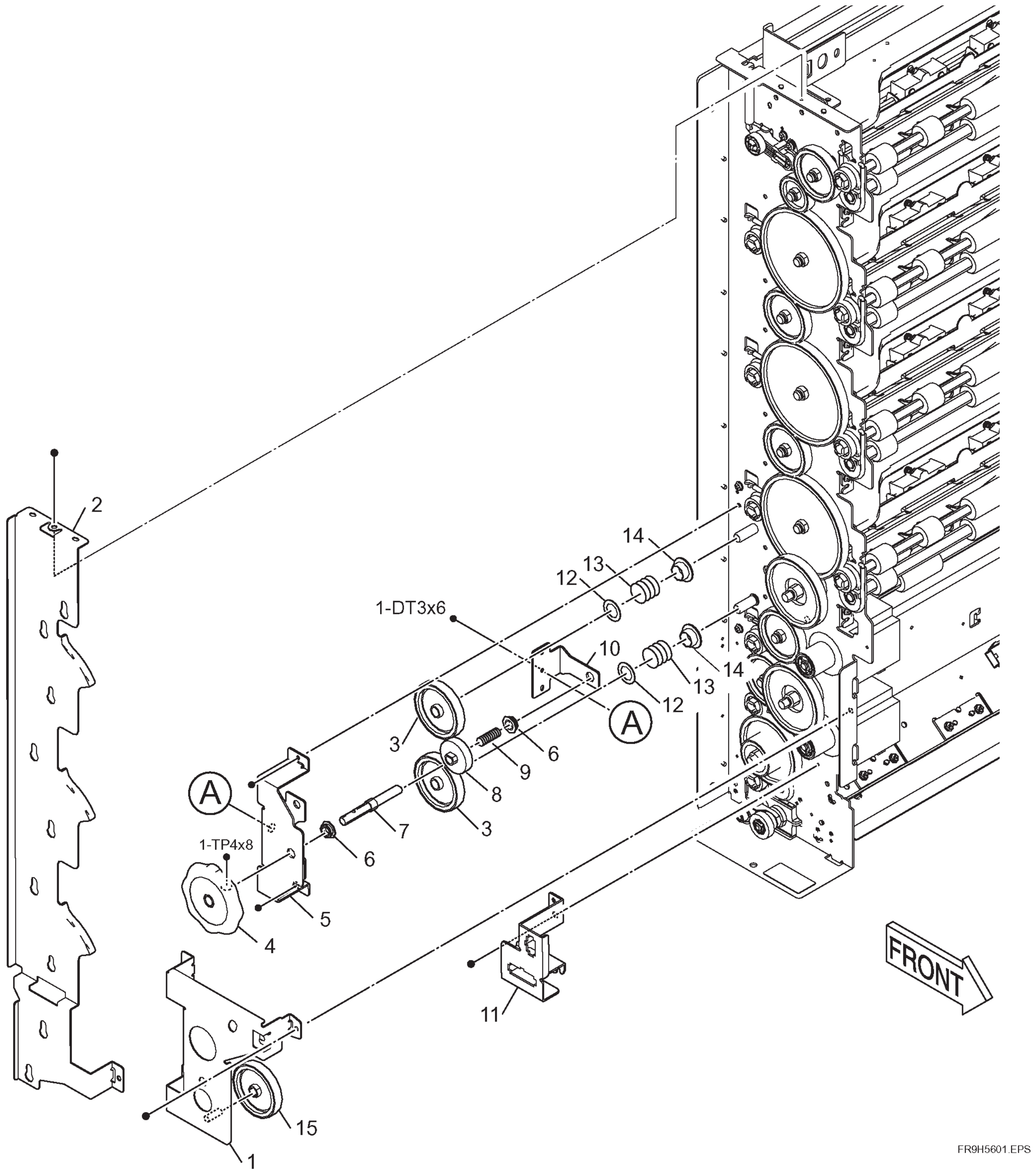
A
37
5
34
A
A
A
7
C
27
24
32
35
22
24
28
18
29
23
23
30
26
36
21
FRONT
DETAIL B
1-TP3x6
13
1-TP3x6
13
1-TP3x6
3
1-TP3x6
14
2
1-TP3x6
3
2
10
1-TP3x6
6
2
9
2
8
DETAIL C
19
20
31
1-DT3x6
FR9H5305.EPS

カセッテセット部 7
CASSETTE SET UNIT 7
03G

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	319N3962	軸	Shaft	4			☞{MC:5.39}
D	2	322SY066	すべり軸受	Plain Bearing	24			☞{MC:5.39}
D	3	332N0521C	ストッパ	Stopper	8			☞{MC:5.39}
D	4	332N0522E	ストッパ	Stopper	4			☞{MC:5.26}
D	5	332N0523E	ストッパ	Stopper	4			☞{MC:5.26}
D	6	332N0613A	ストッパ	Stopper	4			☞{MC:5.39}
E	7	346N1259C	補助板	Plate Support	4			☞{MC:5.25}
E	8	356N9143B	ブラケット	Bracket	4			☞{MC:5.39}
E	9	356N9144	ブラケット	Bracket	4			☞{MC:5.39}
E	10	356N9145A	ブラケット	Bracket	4			☞{MC:5.39}
E	11	356N9146	ブラケット	Bracket	4			☞{MC:5.39}
E	12	356N9147B	ブラケット	Bracket	4			☞{MC:5.39}
D	13	363N2076C	ガイド	Guide	8			☞{MC:5.39}
D	14	363N2477	ガイド	Guide	4			☞{MC:5.39}
D	15	363N2478B	ガイド板	Guide plate	4			☞{MC:5.28}
D	16	363N2479	ガイド板	Guide plate	4			☞{MC:5.28}
D	17	388N1224A	圧縮コイルバネ	Compression Coil Spring	12	L ≒ 64mm		☞{MC:5.39}
D	18	107Y0183/A	ソレノイド	Solenoid	4	SOLA1, 2, 3, 4		☞{MC:5.34}
D	19	146S0029/A	ホトインタラプタ	Photo Sensor	4	SA2, 8, 14, 20		☞{MC:5.29}
D	20	146S0029/A	ホトインタラプタ	Photo Sensor	4	SA3, 9, 15, 21		☞{MC:5.18}
E	21	319Y1161A	軸	Shaft	4			☞{MC:5.37}
E	22	319N3602B	軸	Shaft	4			☞{MC:5.30}
D	23	322SY066	すべり軸受	Plain Bearing	8			☞{MC:5.37}
D	24	322SY066	すべり軸受	Plain Bearing	8			☞{MC:5.30}
D	25	334N3604	ゴムローラ	Rubber Roller	24			☞{MC:5.23}
E	26	341N1103A	アーム	Arm	4			☞{MC:5.37}
E	27	356N6825D	ブラケット	Bracket	4			☞{MC:5.30}
E	28	356N6826B	ブラケット	Bracket	4			☞{MC:5.30}
E	29	356N6829C	ブラケット	Bracket	4			☞{MC:5.37}
E	30	356N9471	ブラケット	Bracket	4			☞{MC:5.34}
E	31	356N9387	ブラケット	Bracket	4			☞{MC:5.18}
D	32	363N1788A/B	ガイド	Guide	4			☞{MC:5.30}
D	33	363N2065D	ガイド板	Guide plate	12			☞{MC:5.23}
E	34	366N0072B	アクチュエータ	Actuator	4			☞{MC:5.29}
D	35	388N1158A	圧縮コイルバネ	Compression Coil Spring	4			☞{MC:5.30}
D	36	388N2449	引張りコイルバネ	Extension Spring	4	L ≒ 34mm		☞{MC:5.37}
D	37	388N3098A	ねじりコイルバネ	Torsion Coil Spring	4			☞{MC:5.29}
D	38	898Y1167	カセッテセット棚アセンブリ	Cassette Setting Shelf Assembly	4		#20001 or later	–

04A フィードロード搬送部 1
FEED LOAD CONVEYOR 1


FR9H5451.EPS

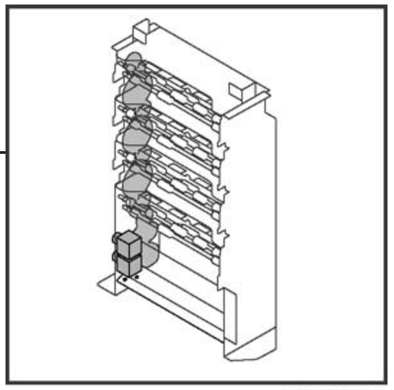


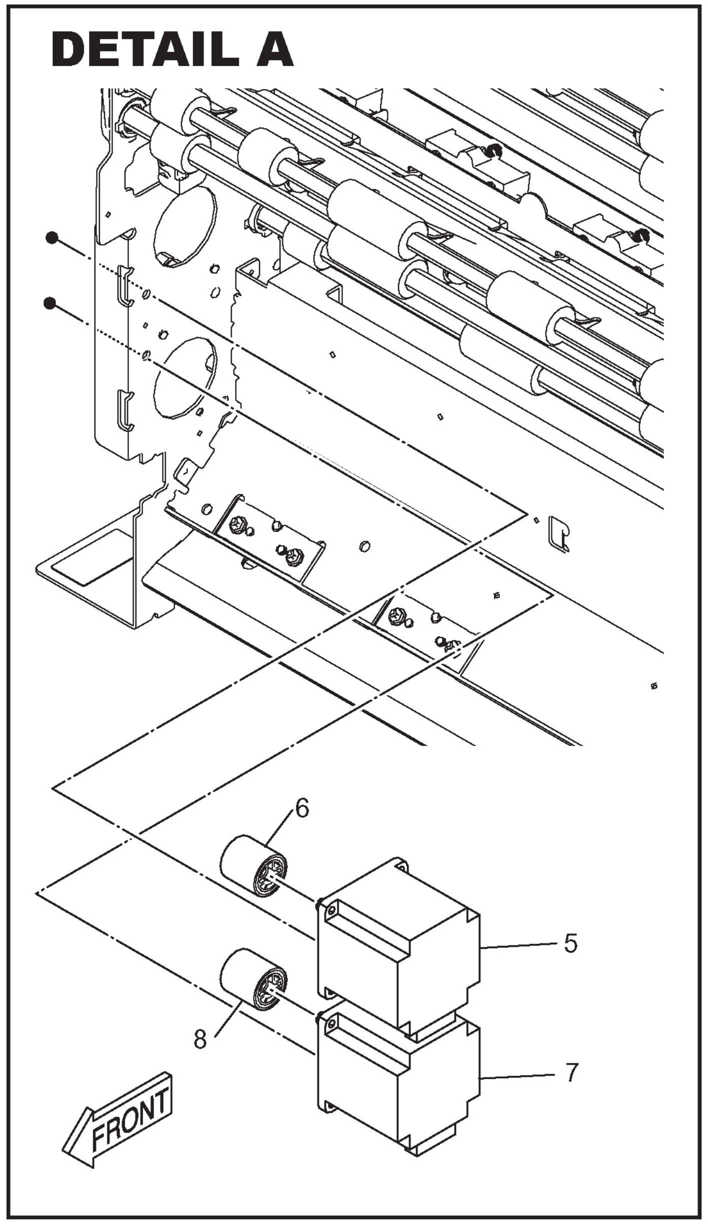
FR9H5601.EPS

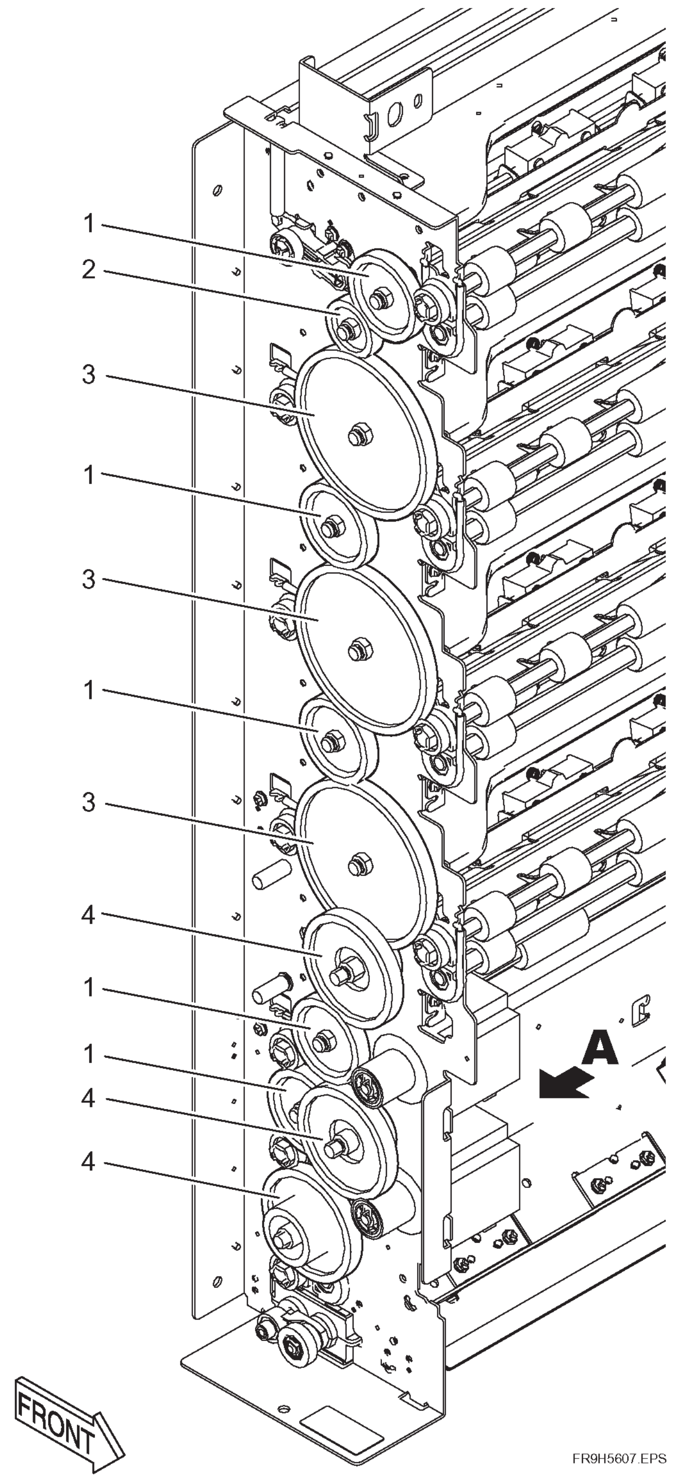
フィードロード搬送部 1
FEED LOAD CONVEYOR 1 04A

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	356N8928B	ブラケット	Bracket	1			☞{MC:6.12}
E	2	356N8929B	ブラケット	Bracket	1			☞{MC:6.11}
D	3	327N1123601B	平歯車	Spur Gear	2			☞{MC:6.6}
E	4	339N0022A	ハンドル	Handle	1			☞{MC:6.6}
E	5	356N8931A	ブラケット	Bracket	1			☞{MC:6.6}
D	6	322SY232	すべり軸受	Plain Bearing	2			☞{MC:6.6}
E	7	319N3662A	軸	Shaft	1			☞{MC:6.6}
D	8	327N1122416B	平歯車	Spur Gear	1			☞{MC:6.6}
D	9	388N1213A	圧縮コイルバネ	Compression Coil Spring	1	L ≒ 20mm		☞{MC:6.6}
E	10	356N8930A	ブラケット	Bracket	1			☞{MC:6.6}
E	11	356N9134	ブラケット	Bracket	1			☞{MC:6.28}
E	12	309S0008	スペーサ	Spacer	2			☞{MC:6.6}
D	13	388N1215	圧縮コイルバネ	Compression Coil Spring	2	L ≒ 13mm		☞{MC:6.6}
D	14	322SY060	すべり軸受	Plain Bearing	2			☞{MC:6.6}
D	15	327N1123203	平歯車	Spur Gear	1			☞{MC:6.12}

04B フィードロード搬送部 2
FEED LOAD CONVEYOR 2


FR9H5452.EPS


DETAIL A
6
5
8
7
FRONT

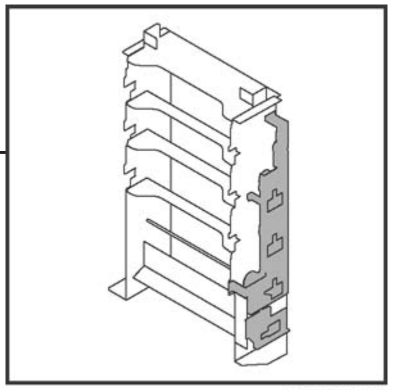

1
2
3
1
3
1
3
4
1
1
4
4
A
FRONT
FR9H5607.EPS

フィードロード搬送部 2
FEED LOAD CONVEYOR 2
04B

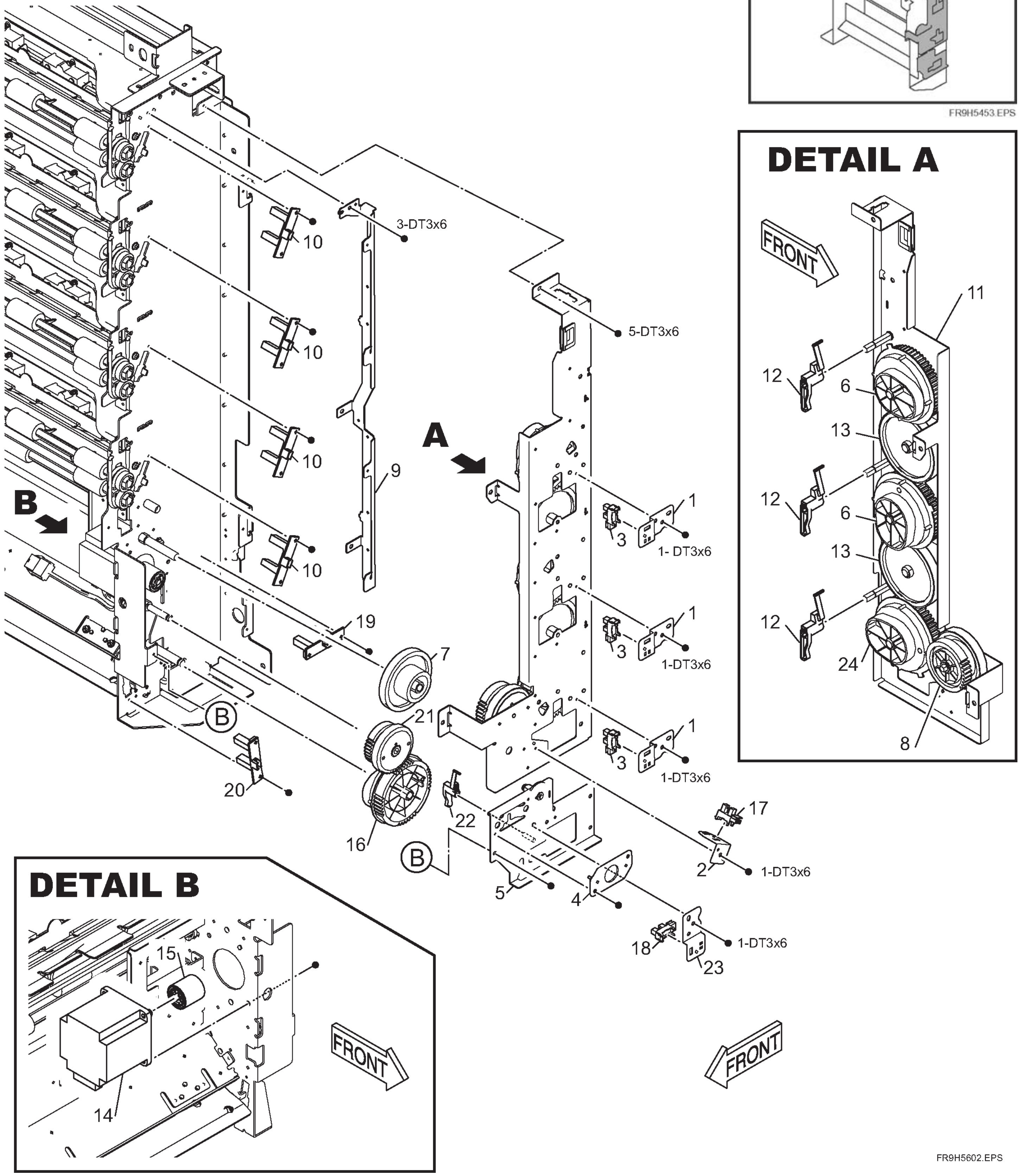
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	327N1123601B	平歯車	Spur Gear	5			☞{MC:6.13}
D	2	327N1122421	平歯車	Spur Gear	1			☞{MC:6.13}
D	3	327N1127201A	平歯車	Spur Gear	3			☞{MC:6.13}
D	4	327N0188A	平歯車	Spur Gear	3			☞{MC:6.13}
D	5	118SX167/A	パルスモータ	Stepping Motor	1	MB1		☞{MC:6.16}
D	6	327N1121610A	平歯車	Spur Gear	1			☞{MC:6.16}
D	7	118SX167/A	パルスモータ	Stepping Motor	1	MB2		☞{MC:6.17}
D	8	327N1121610A	平歯車	Spur Gear	1			☞{MC:6.17}

04C フィードロード搬送部 3
FEED LOAD CONVEYOR 3

フィードロード搬送部 3
FEED LOAD CONVEYOR 3 04C



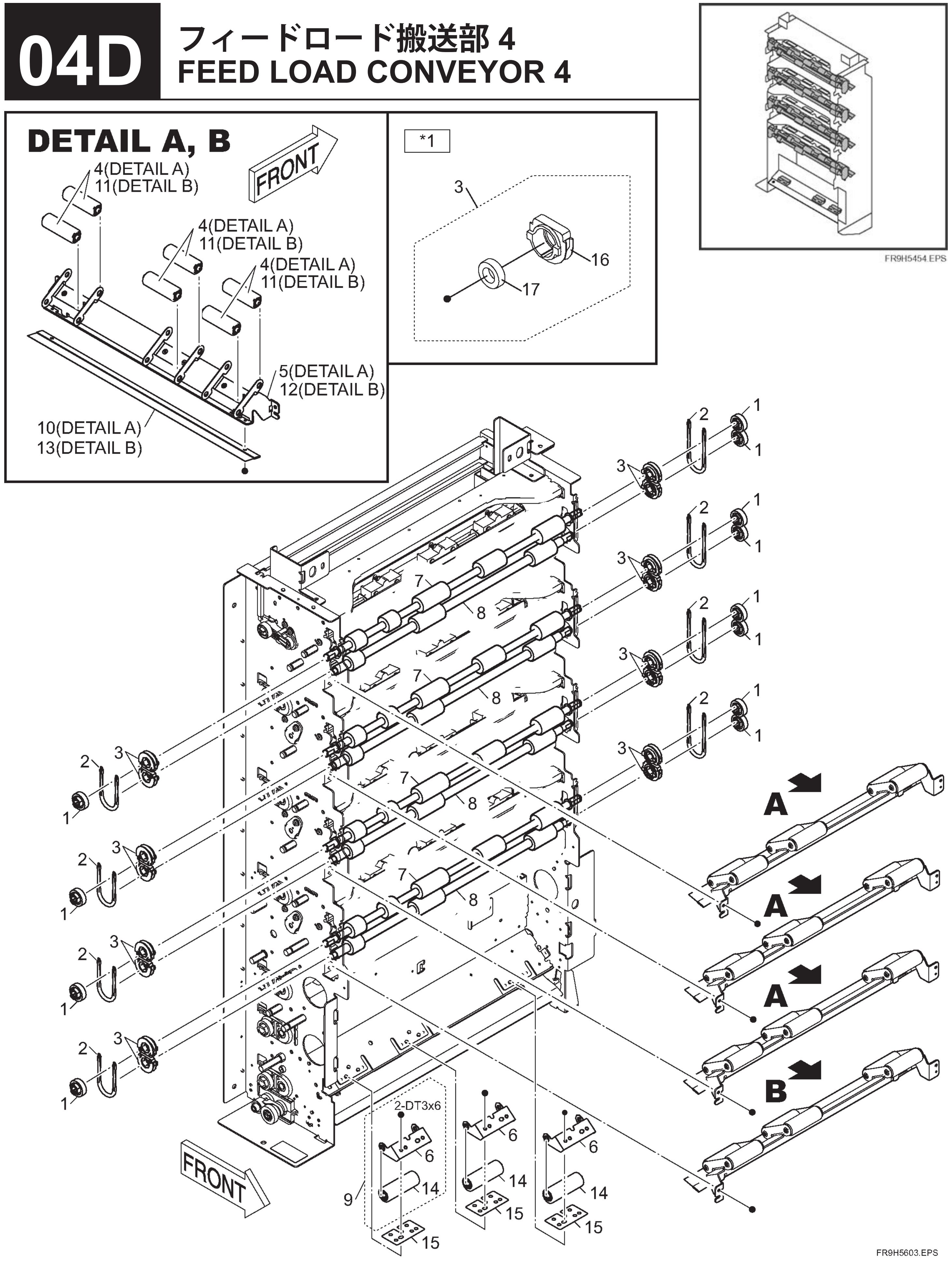
FR9H5453.EPS


DETAIL A
FRONT
11
12
6
13
12
6
13
12
24
8
A
B
10
10
10
10
3-DT3x6
5-DT3x6
9
1
3
1- DT3x6
1
3
1-DT3x6
1
3
1-DT3x6
19
7
B
21
20
16
22
B
17
2
1-DT3x6
5
4
18
1-DT3x6
23
FRONT
DETAIL B
15
14
FRONT

FR9H5602.EPS

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	356N9133A	ブラケット	Bracket	3			–
E	2	356N9135	ブラケット	Bracket	1			–
D	3	146S0029/A	ホトインタラプタ	Photo Sensor	3	SB7, 8, 9		☞{MC:6.3}
E	4	356N9188	ブラケット	Bracket	1			☞{MC:6.10}
E	5	356N9138B	ブラケット	Bracket	1			☞{MC:6.10}
D	6	329N0156B	カム	Cam	2			☞{MC:6.9}
D	7	327N0188A	平歯車	Spur Gear	1			☞{MC:6.18}
D	8	327Y0176C	平歯車	Spur Gear	1			☞{MC:6.36}
E	9	356N9186A	ブラケット	Bracket	1			☞{MC:6.1}
D	10.1	113Y1466	ボードアセンブリ	Board Assembly	4	SB1, 2, 3, 4		☞{MC:6.2}
D	10.2	146N0016B	フォトインタラプタ	Photo Sensor	4	SB1, 2, 3, 4		☞{MC:6.2}
E	11	346N1251B	補助板	Plate Support	1			☞{MC:6.9}
D	12	328N0045A	爪	Claw	3			☞{MC:6.9}
D	13	327N0190B	平歯車	Spur Gear	2			☞{MC:6.9}
D	14	118SX167/A	パルスモータ	Stepping Motor	1	MB3		☞{MC:6.18}
D	15	327N1121610A	平歯車	Spur Gear	1			☞{MC:6.18}
D	16	329N0165A	カム	Cam	1			☞{MC:6.10}
D	17	146S0029/A	ホトインタラプタ	Photo Sensor	1	SB10		☞{MC:6.4}
D	18	146S0029/A	ホトインタラプタ	Photo Sensor	1	SB11		☞{MC:6.5}
D	19.1	113Y1466	ボードアセンブリ	Board Assembly	1	SB5		☞{MC:6.14}
D	19.2	146N0016B	フォトインタラプタ	Photo Sensor	1	SB5		☞{MC:6.14}
D	20.1	113Y1466	ボードアセンブリ	Board Assembly	1	SB6		☞{MC:6.15}
D	20.2	146N0016B	フォトインタラプタ	Photo Sensor	1	SB6		☞{MC:6.15}
D	21	327Y0176C	平歯車	Spur Gear	1			☞{MC:6.10}
D	22	328N0045A	爪	Claw	1			☞{MC:6.10}
E	23	356N9133A	ブラケット	Bracket	1			☞{MC:6.10}
D	24	329N0156B	カム	Cam	1			☞{MC:6.36}

04D フィードロード搬送部 4 FEED LOAD CONVEYOR 4


DETAIL A, B
FRONT
4(DETAIL A)
11(DETAIL B)
4(DETAIL A)
11(DETAIL B)
4(DETAIL A)
11(DETAIL B)
5(DETAIL A)
12(DETAIL B)
10(DETAIL A)
13(DETAIL B)
*1
3
16
17
FR9H5454.EPS
1
2
3
7
8
A
A
A
B
2-DT3x6
6
9
14
15
FRONT
FR9H5603.EPS

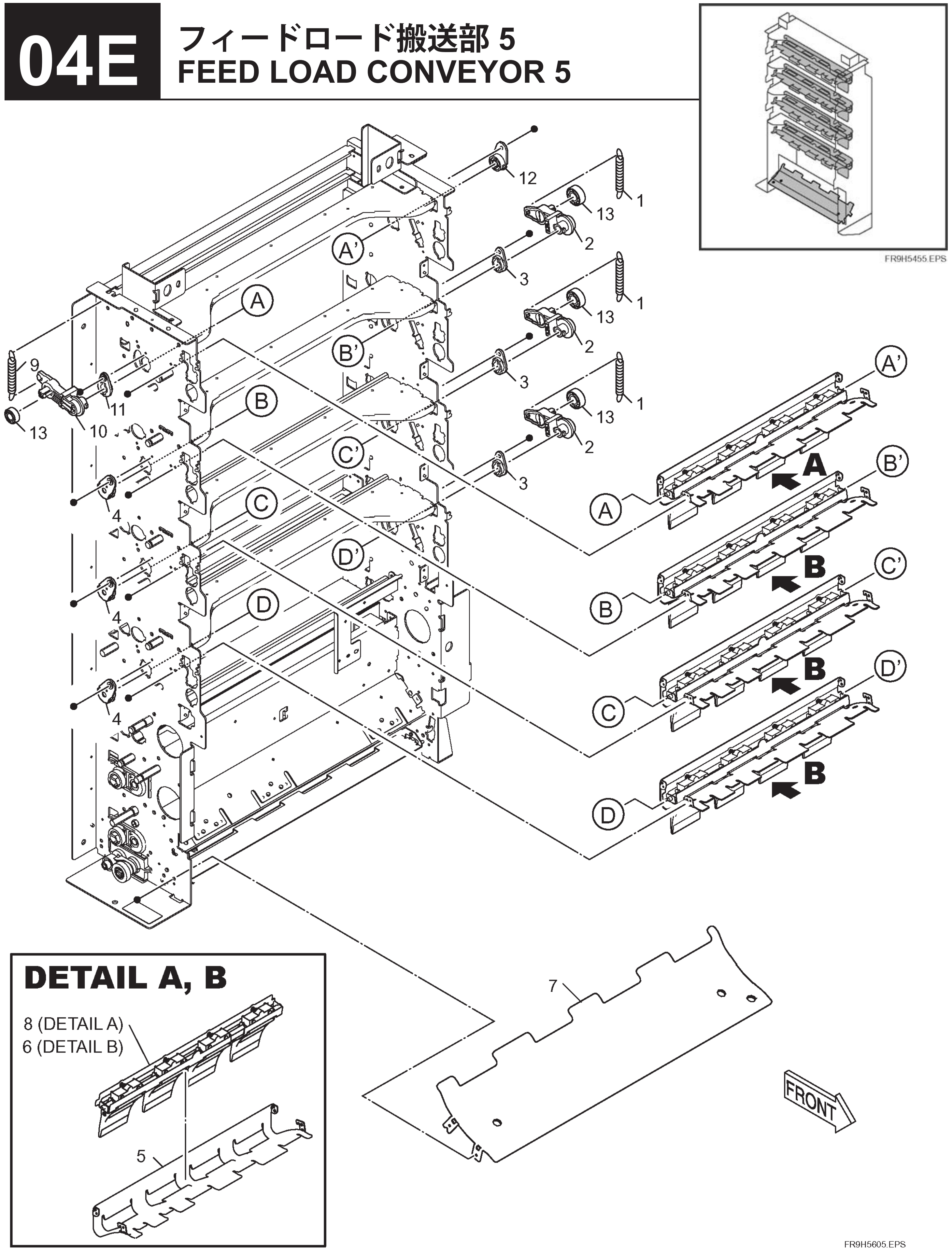
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	327N1121608A	平歯車	Spur Gear	12			☞{MC:6.23}
D	2	388N2517	引張りコイルバネ	Extension Spring	8	L ≒ 90mm		☞{MC:6.23}
D	3	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	16	*1	#20001 or later	☞{MC:6.23}
D	4	334N3580B	樹脂ローラ	Resin Roller	18			☞{MC:6.19}
E	5	356N9136B	ブラケット	Bracket	3			☞{MC:6.19}
D	6	388N5269	板バネ	Leaf Spring	3			☞{MC:6.22}
D	7	334Y3214A	ゴムローラ	Rubber Roller	4			☞{MC:6.23}
D	8	334N3577A	ゴムローラ	Rubber Roller	4			☞{MC:6.23}
D	9	334Y2244A	樹脂ローラアセンブリ	Resin Roller Assembly	3			☞{MC:6.22}
D	10	387N0168	帯電防止材	Antistatic Brush	3			☞{MC:6.19}
D	11	334N3580B	樹脂ローラ	Resin Roller	6			☞{MC:6.20}
E	12	356N9136B	ブラケット	Bracket	1			☞{MC:6.20}
D	13	387N0168	帯電防止材	Antistatic Brush	1			☞{MC:6.20}
D	14	334N3580B	樹脂ローラ	Resin Roller	3			☞{MC:6.22}
E	15	347N100073	スペーサ	Spacer	3			–
D	16	360N0475A	ハウジング	Housing	16			☞{MC:6.23}
D	17	322SB052	ころがり軸受	Ball Bearing	16			☞{MC:6.23}

*1: REF.3 交換時、部品在庫が無い場合は、REF.16 と REF.17 を手配すること。

*1: If there is no REF.3 in stock for replacement , use REF.16 and REF.17.

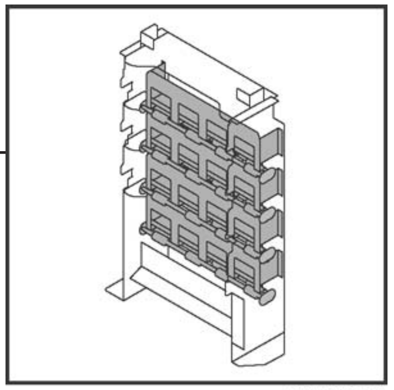
04E フィードロード搬送部 5
FEED LOAD CONVEYOR 5

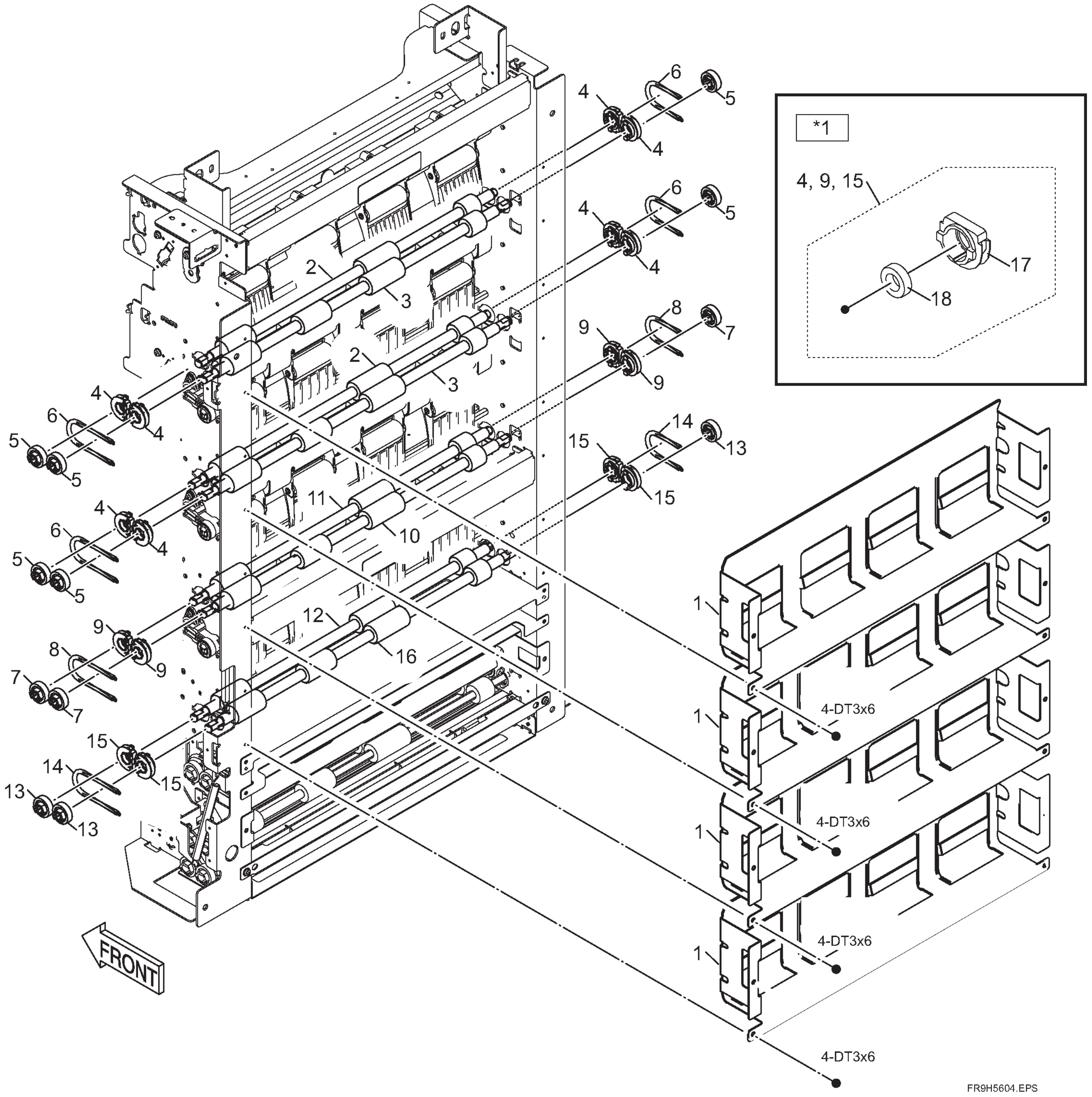
フィードロード搬送部 5
FEED LOAD CONVEYOR 5
04E


FR9H5455.EPS
12
13
1
2
3
A'
A
B'
B
C'
C
D'
D
9
11
13
10
4
DETAIL A, B
8 (DETAIL A)
6 (DETAIL B)
5
7
FRONT
FR9H5605.EPS

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	388N2518	引張りコイルバネ	Extension Spring	3	L ≒ 42mm		☞{MC:6.25}
E	2	341N1049	アーム	Arm	3			☞{MC:6.25}
D	3	322N0032	軸受	Bearing	3			☞{MC:6.25}
D	4	322N2001A	すべり軸受	Plain Bearing	3			☞{MC:6.25}
E	5	363N2467E/F	ガイド	Guide	4			☞{MC:6.27}
D	6	363Y0433	ガイド	Guide	3			☞{MC:6.26}
D	7	363N2227C/D	ガイド	Guide	1			☞{MC:6.28}
D	8	363Y0470	ガイド	Guide	1			☞{MC:6.26}
D	9	388N2518	引張りコイルバネ	Extension Spring	1	L ≒ 42mm		☞{MC:6.24}
E	10	341N1049	アーム	Arm	1			☞{MC:6.24}
D	11	322N0032	軸受	Bearing	1			☞{MC:6.24}
D	12	322N2001A	すべり軸受	Plain Bearing	1			☞{MC:6.24}
D	13	334N2387A	樹脂ローラ	Resin Roller	1			☞{MC:6.24}

04F フィードロード搬送部 6
FEED LOAD CONVEYOR 6





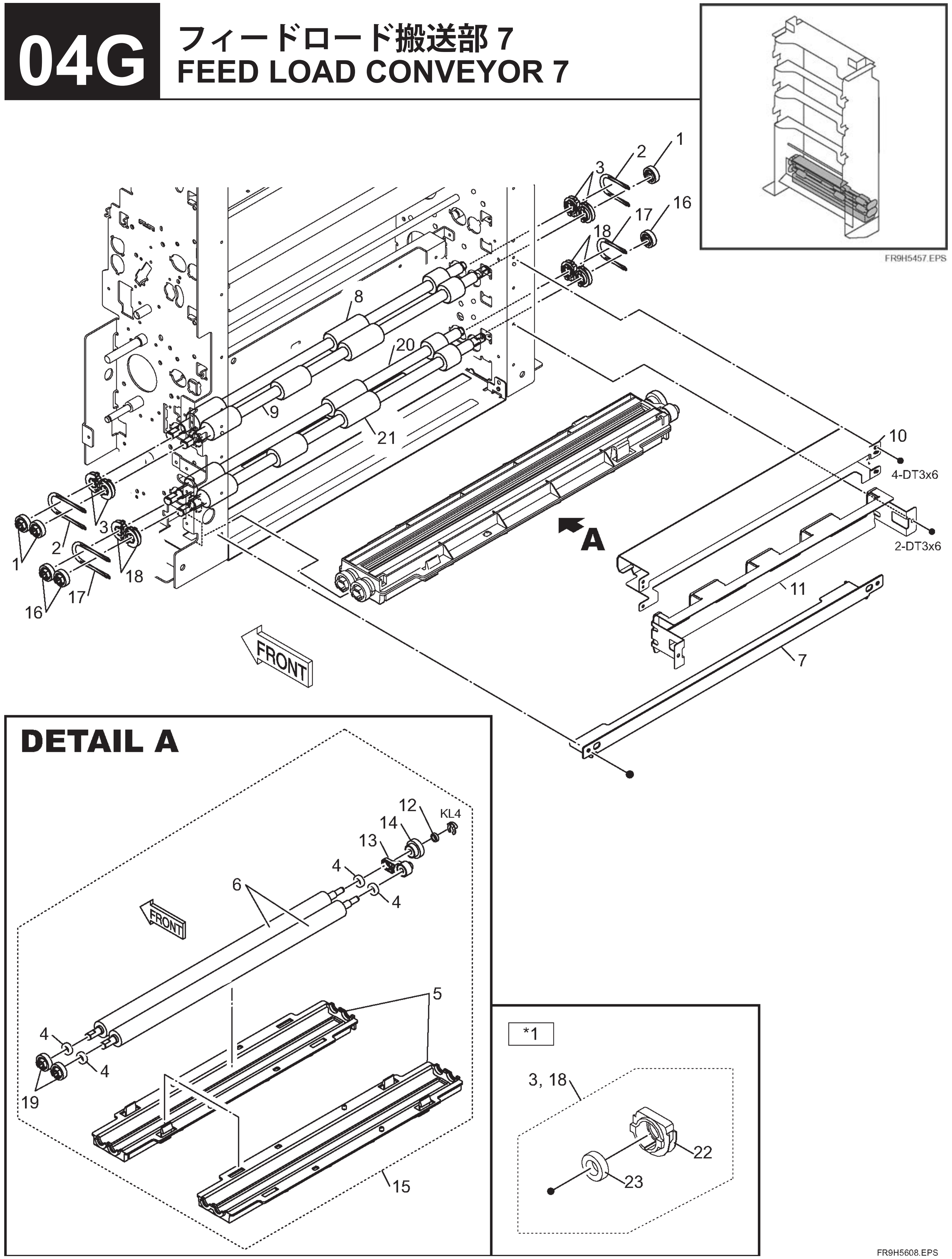
フィードロード搬送部 6
FEED LOAD CONVEYOR 6 04F

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	363Y0450	ガイド	Guide	4			–
D	2	334N3577A	ゴムローラ	Rubber Roller	2			☞{MC:6.29}
D	3	334N3578A	ゴムローラ	Rubber Roller	2			☞{MC:6.29}
D	4	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	8	*1	#20001 or later	☞{MC:6.29}
D	5	327N1121608A	平歯車	Spur Gear	6			☞{MC:6.29}
D	6	388N2517	引張りコイルバネ	Extension Spring	4	L ≒ 90mm		☞{MC:6.29}
D	7	327N1121608A	平歯車	Spur Gear	3			☞{MC:6.30}
D	8	388N2517	引張りコイルバネ	Extension Spring	2	L ≒ 90mm		☞{MC:6.30}
D	9	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*1	#20001 or later	☞{MC:6.30}
D	10	334N3578A	ゴムローラ	Rubber Roller	1			☞{MC:6.30}
D	11	334N3577A	ゴムローラ	Rubber Roller	1			☞{MC:6.30}
D	12	334N3577A	ゴムローラ	Rubber Roller	1			☞{MC:6.31}
D	13	327N1121608A	平歯車	Spur Gear	3			☞{MC:6.31}
D	14	388N2517	引張りコイルバネ	Extension Spring	2	L ≒ 90mm		☞{MC:6.31}
D	15	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*1	#20001 or later	☞{MC:6.31}
D	16	334N3578A	ゴムローラ	Rubber Roller	1			☞{MC:6.31}
D	17	360N0475A	ハウジング	Housing	16			☞{MC:6.29} ☞{MC:6.30} ☞{MC:6.31}
D	18	322SB052	ころがり軸受	Ball Bearing	16			☞{MC:6.29} ☞{MC:6.30} ☞{MC:6.31}

*1: REF.4,REF.9,REF.15 交換時、部品在庫が無い場合は、REF.17 と REF.18 を手配すること。

*1: If there is no REF.4/REF.9/REF.15 in stock for replacement , use REF.17 and REF.18.

04G フィードロード搬送部 7 FEED LOAD CONVEYOR 7



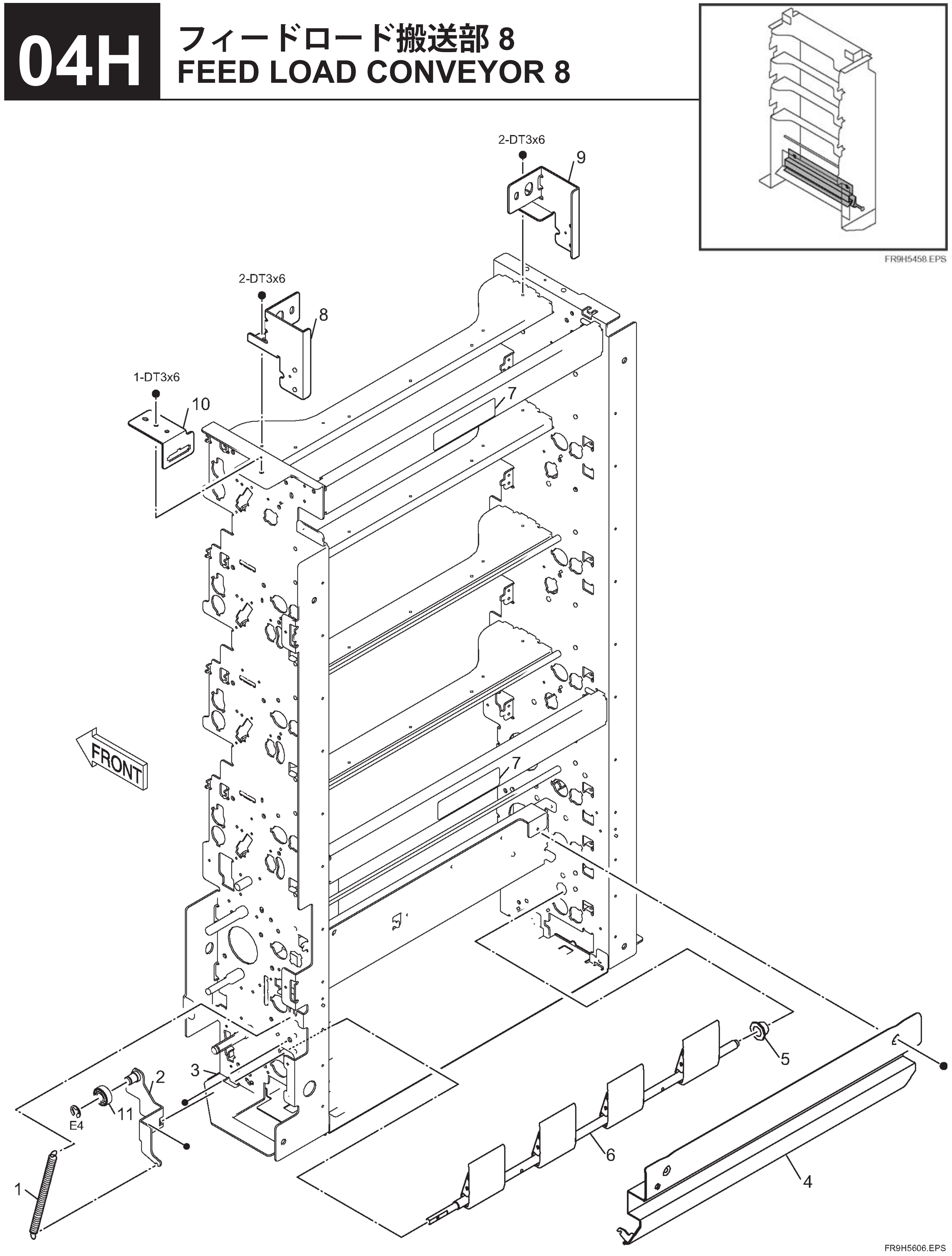
フィードロード搬送部 7 FEED LOAD CONVEYOR 7 04G

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	327N1121608A	平歯車	Spur Gear	3			☞{MC:6.32}
D	2	388N2517	引張りコイルバネ	Extension Spring	2	L ≒ 90mm		☞{MC:6.32}
D	3	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*1	#20001 or later	☞{MC:6.32}
D	4	322SF229	ころがり軸受	Ball Bearing	4			☞{MC:6.7}
E	5	362N0720A	受	Box	2			☞{MC:6.7}
D	6	334N5015B	ブラシローラ	Brush Roller	2			☞{MC:6.7}
E	7	356N9137	ブラケット	Bracket	1			–
D	8	334N3577A	ゴムローラ	Rubber Roller	1			☞{MC:6.32}
D	9	334N3578A	ゴムローラ	Rubber Roller	1			☞{MC:6.32}
D	10	363Y0456B	ガイド	Guide	1			–
D	11	363Y0449	ガイド	Guide	1			–
D	12	322SP203	ころがり軸受	Ball Bearing	1			☞{MC:6.7}
D	13	332N0620	ストッパ	Stopper	1			☞{MC:6.7}
D	14	327N0208	平歯車	Spur Gear	1			☞{MC:6.7}
D	15	334Y5007	ブラシローラアセンブリ	Brush Roller Assembly	1			☞{MC:6.7}
D	16	327N1121608A	平歯車	Spur Gear	3			☞{MC:6.34}
D	17	388N2517	引張りコイルバネ	Extension Spring	2	L ≒ 90mm		☞{MC:6.34}
D	18	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*1	#20001 or later	☞{MC:6.34}
D	19	327N1121608A	平歯車	Spur Gear	2			☞{MC:6.7}
D	20	334N3577A	ゴムローラ	Rubber Roller	1			☞{MC:6.34}
D	21	334N3578A	ゴムローラ	Rubber Roller	1			☞{MC:6.34}
D	22	360N0475A	ハウジング	Housing	8			☞{MC:6.32} ☞{MC:6.34}
D	23	322SB052	ころがり軸受	Ball Bearing	8			☞{MC:6.32} ☞{MC:6.34}

*1: REF.3,REF.18 交換時、部品在庫が無い場合は、REF.22 と REF.23 を手配すること。

*1: If there is no REF.3/REF.18 in stock for replacement , use REF.22 and REF.23.

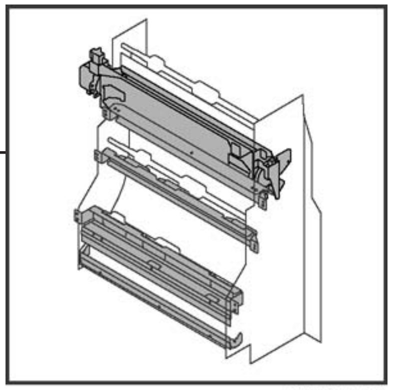
04H フィードロード搬送部 8
FEED LOAD CONVEYOR 8


2-DT3x6
9
2-DT3x6
8
1-DT3x6
10
7
FRONT
7
5
3
2
11
E4
1
6
4
FR9H5458.EPS
FR9H5606.EPS

フィードロード搬送部 8
FEED LOAD CONVEYOR 8 04H

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	388N2520	引張りコイルバネ	Extension Spring	1	L ≒ 80mm		☞{MC:6.33}
E	2	341N1050B	アーム	Arm	1			☞{MC:6.33}
D	3	322N2002	すべり軸受	Plain Bearing	1			☞{MC:6.33}
D	4	363Y0455B/C	ガイド	Guide	1			☞{MC:6.35}
D	5	322SY054	すべり軸受	Plain Bearing	1			☞{MC:6.33}
D	6	363Y0471/A	ガイド	Guide	1			☞{MC:6.33}
E	7	405N0186	銘板	Label	2			–
E	8	356N9184B	ブラケット	Bracket	1			–
E	9	356N9185B	ブラケット	Bracket	1			–
E	10	356N9190	ブラケット	Bracket	1			–
D	11	334N2387A	樹脂ローラ	Resin Roller	1			☞{MC:6.33}

05A 幅寄搬送部 1
SIDE-POSITIONING CONVEYOR 1



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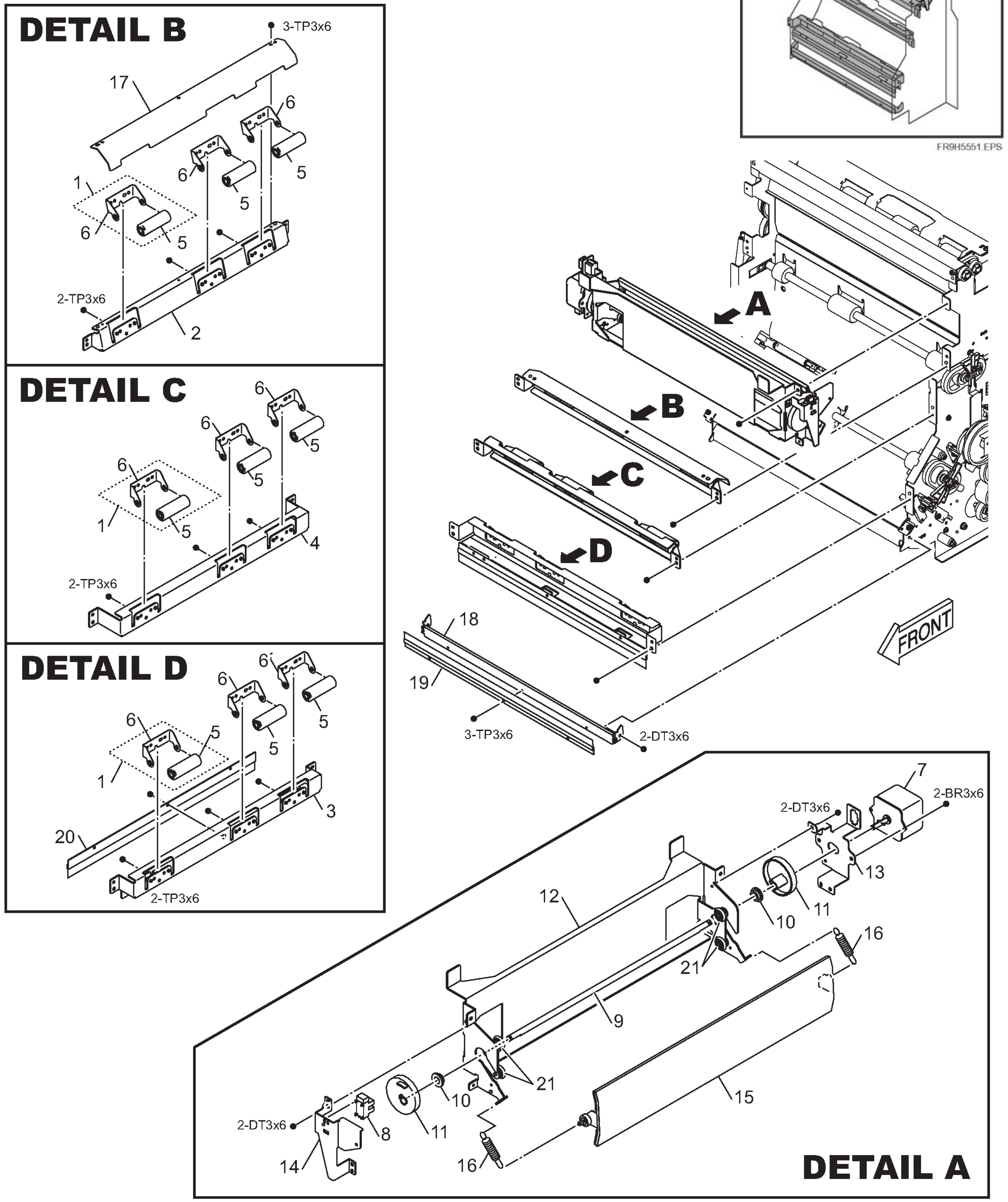
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DETAIL D
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2-DT3x6
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DETAIL A

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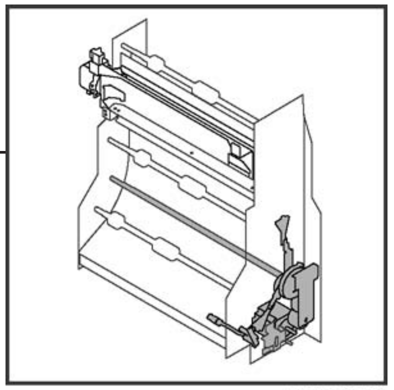
幅寄搬送部 1
SIDE-POSITIONING CONVEYOR 1 05A

RANK	REF.	PART NO.	PART NAME	QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	334Y2244A	樹脂ローラアセンブリ Resin Roller Assembly	9			☞{MC:7.22}
E	2	356N8932B	ブラケット Bracket	1			☞{MC:7.22}
E	3	356N9166D	ブラケット Bracket	1			☞{MC:7.22}
E	4	356N9230A	ブラケット Bracket	1			☞{MC:7.22}
D	5	334N3580B	樹脂ローラ Resin Roller	9			☞{MC:7.22}
D	6	388N5269	板バネ Leaf Spring	9			☞{MC:7.22}
D	7	118SX171/B/C/D	パルスモータ Stepping Motor	1	MC4		☞{MC:7.11}
D	8	146S0029/A	ホトインタラプタ Photo Sensor	1	SC4		☞{MC:7.6}
E	9	319N3963A	軸 Shaft	1			☞{MC:7.29}
D	10	322FC308E	すべり軸受 Plain Bearing	2			☞{MC:7.29}
D	11	329N0162A	カム Cam	2			☞{MC:7.30}
E	12	356N9155A	ブラケット Bracket	1			☞{MC:7.29}
E	13	356N9158D	ブラケット Bracket	1			☞{MC:7.11}
E	14	356N9159B	ブラケット Bracket	1			☞{MC:7.6}
D	15	363Y0460	ガイド Guide	1			☞{MC:7.30}
D	16	388N2523	引張りコイルバネ Extension Spring	2	L ≒ 22mm		☞{MC:7.30}
D	17	363N2558	ガイド Guide	1			☞{MC:7.22}
E	18	356N9422A	ブラケット Bracket	1			–
D	19	387N0137C/D	帯電防止材 Antistatic Brush	1			–
D	20	387N0119C/D	帯電防止材 Antistatic Brush	1			–
D	21	334F2932A	樹脂ローラ Resin Roller	4			☞{MC:7.29}

05B 幅寄搬送部 2
SIDE-POSITIONING CONVEYOR 2



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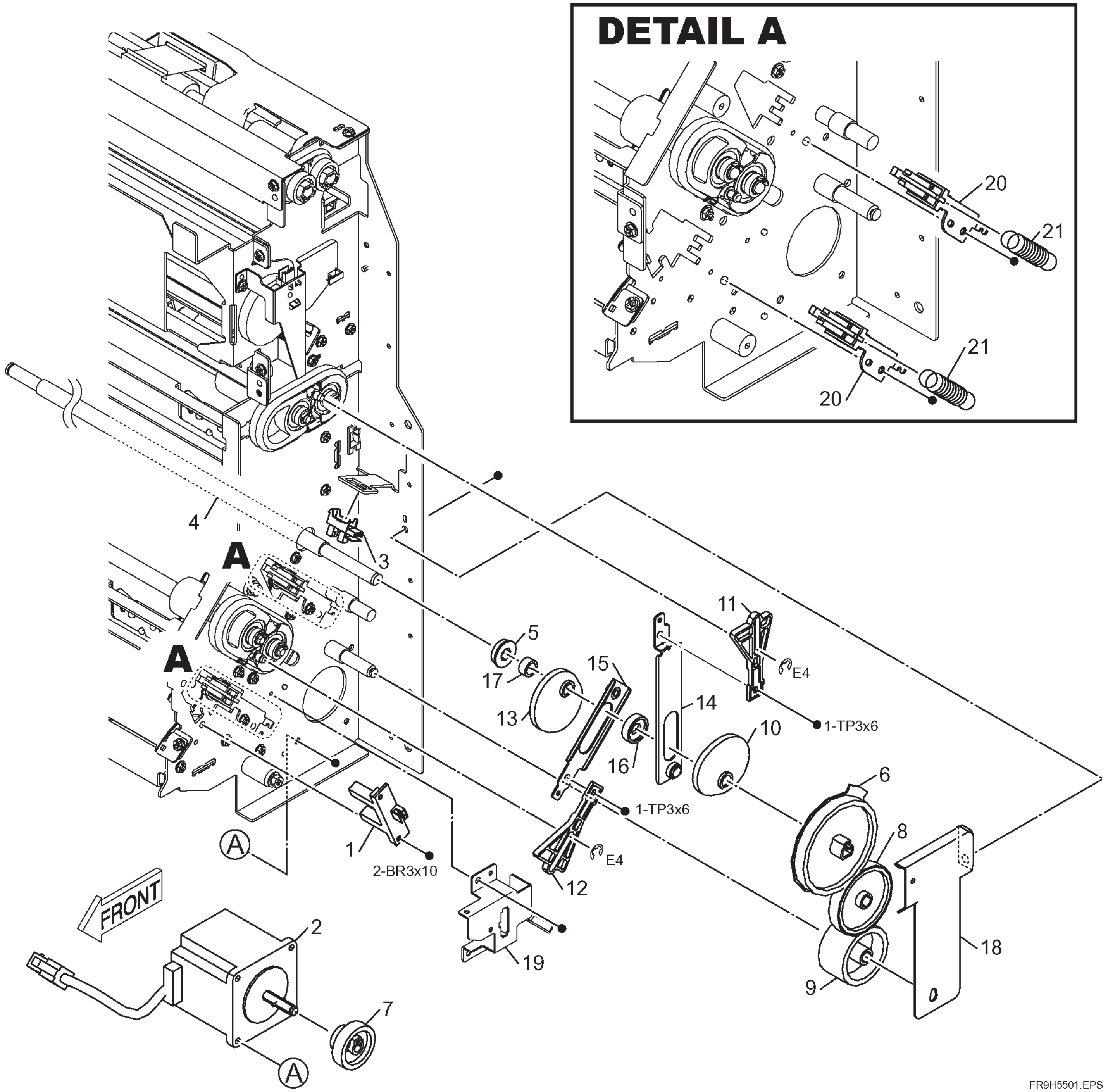

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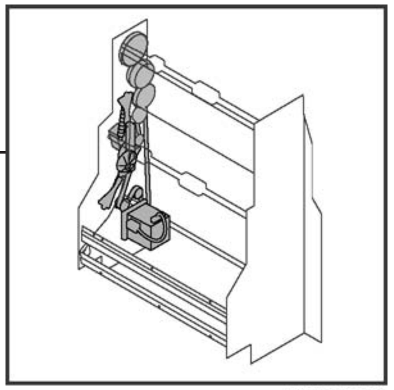
幅寄搬送部 2
SIDE-POSITIONING CONVEYOR 2
05B

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1.1	113Y1466	ボードアセンブリ	Board Assembly	1	SC3		☞{MC:7.5}
D	1.2	146N0016B	フォトインタラプタ	Photo Sensor	1	SC3		☞{MC:7.5}
D	2	118SX167/A	パルスモータ	Stepping Motor	1	MC2		☞{MC:7.9}
D	3	146S0029/A	ホトインタラプタ	Photo Sensor	1	SC2		☞{MC:7.4}
E	4	319N3940A	軸	Shaft	1			☞{MC:7.21}
D	5	322SP214	ころがり軸受	Ball Bearing	1			☞{MC:7.19}
D	6	327N0143C	平歯車	Spur Gear	1			☞{MC:7.3}
D	7	327N0189A	平歯車	Spur Gear	1			☞{MC:7.9}
D	8	327N0194	平歯車	Spur Gear	1			☞{MC:7.3}
D	9	327N1103802	平歯車	Spur Gear	1			☞{MC:7.3}
D	10	329N0145A	カム	Cam	1			☞{MC:7.19}
D	11	329N0148B	カム	Cam	1			☞{MC:7.19}
D	12	329N0149A	カム	Cam	1			☞{MC:7.19}
D	13	329N0157	カム	Cam	1			☞{MC:7.19}
E	14	342N0110A	レバー	Lever	1			☞{MC:7.19}
E	15	342N0111A	レバー	Lever	1			☞{MC:7.19}
E	16	347N1625A	スペーサ	Spacer	1			☞{MC:7.19}
E	17	347N1848	スペーサ	Spacer	1			☞{MC:7.19}
E	18	356N9157A	ブラケット	Bracket	1			☞{MC:7.3}
E	19	356N9167A	ブラケット	Bracket	1			☞{MC:7.14}
D	20	328Y0007	爪	Claw	2			☞{MC:7.14}
D	21	388N2448A	引張りコイルバネ	Extension Spring	2	L ≒ 36mm		☞{MC:7.14}

05C 幅寄搬送部 3
SIDE-POSITIONING CONVEYOR 3



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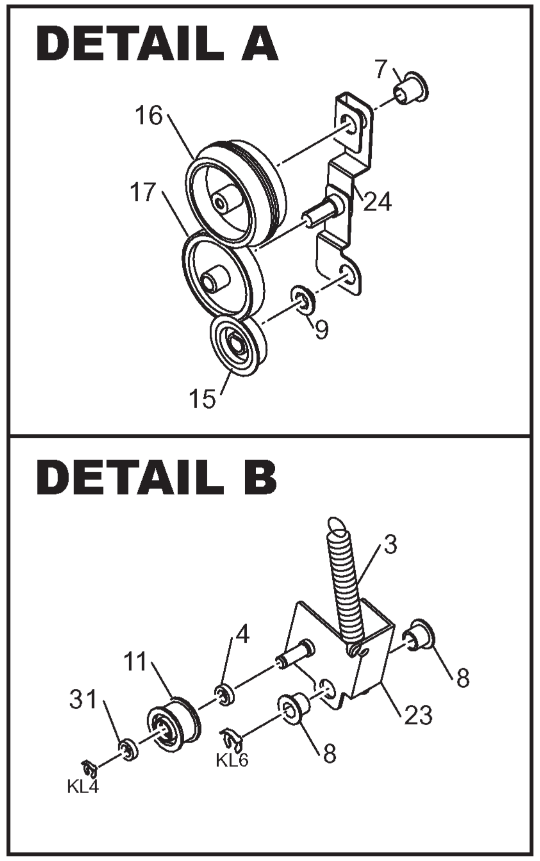

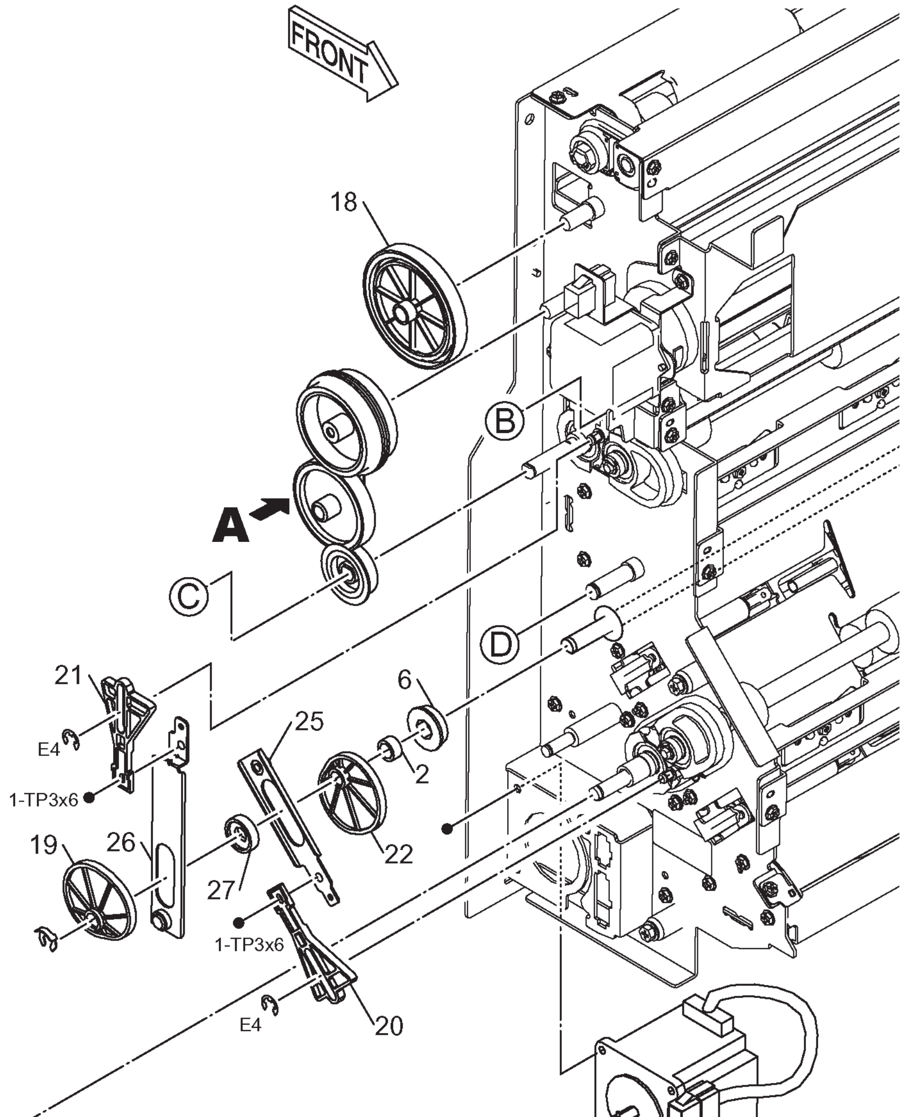

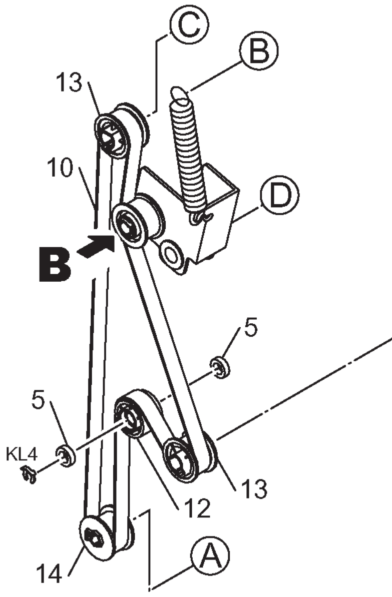

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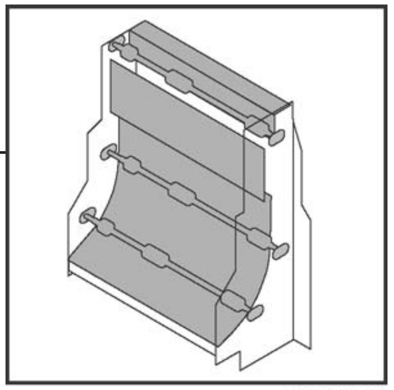
幅寄搬送部 3
SIDE-POSITIONING CONVEYOR 3 05C

RANK	REF.	PART NO.	PART NAME	QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	118SX167/A	パルスモータ Stepping Motor	1	MC3		☞{MC:7.10}
E	2	347N1848	スペーサ Spacer	1			☞{MC:7.20}
D	3	388N2474A	引張りコイルバネ Extension Spring	1	L ≒ 58mm		☞{MC:7.7}
D	4	322SP203	ころがり軸受 Ball Bearing	2			☞{MC:7.15}
D	5	322SP203	ころがり軸受 Ball Bearing	2			☞{MC:7.7}
D	6	322SP214	ころがり軸受 Ball Bearing	1			☞{MC:7.20}
D	7	322SY059	すべり軸受 Plain Bearing	1			☞{MC:7.16}
D	8	322SY063	すべり軸受 Plain Bearing	2			☞{MC:7.15}
D	9	322SY122	すべり軸受 Plain Bearing	1			☞{MC:7.16}
D	10	323S3069	タイミングベルト Timing Belt	1			☞{MC:7.7}
D	11	324N1026A	平ベルト車 Flat Belt Wheel	1			☞{MC:7.15}
D	12	324N1032A	平ベルト車 Flat Belt Wheel	1			☞{MC:7.7}
D	13	324N3164A	タイミングベルト車 Timing Belt Pulley	2			☞{MC:7.7}
D	14	324N3165A	タイミングベルト車 Timing Belt Pulley	1			☞{MC:7.10}
D	15	327N0198	平歯車 Spur Gear	1			☞{MC:7.16}
D	16	327N0199	平歯車 Spur Gear	1			☞{MC:7.16}
D	17	327N1123601B	平歯車 Spur Gear	1			☞{MC:7.16}
D	18	327N1124802	平歯車 Spur Gear	1			☞{MC:7.17}
D	19	329N0145A	カム Cam	1			☞{MC:7.20}
D	20	329N0148B	カム Cam	1			☞{MC:7.20}
D	21	329N0149A	カム Cam	1			☞{MC:7.20}
D	22	329N0157	カム Cam	1			☞{MC:7.20}
E	23	341N0944C	アーム Arm	1			☞{MC:7.15}
E	24	342N0109	レバー Lever	1			☞{MC:7.16}
E	25	342N0111A	レバー Lever	1			☞{MC:7.20}
E	26	342N0129A	レバー Lever	1			☞{MC:7.20}
E	27	347N1625A	スペーサ Spacer	1			☞{MC:7.20}

05D 幅寄搬送部 4
SIDE-POSITIONING CONVEYOR 4



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幅寄搬送部 4
SIDE-POSITIONING CONVEYOR 4 05D

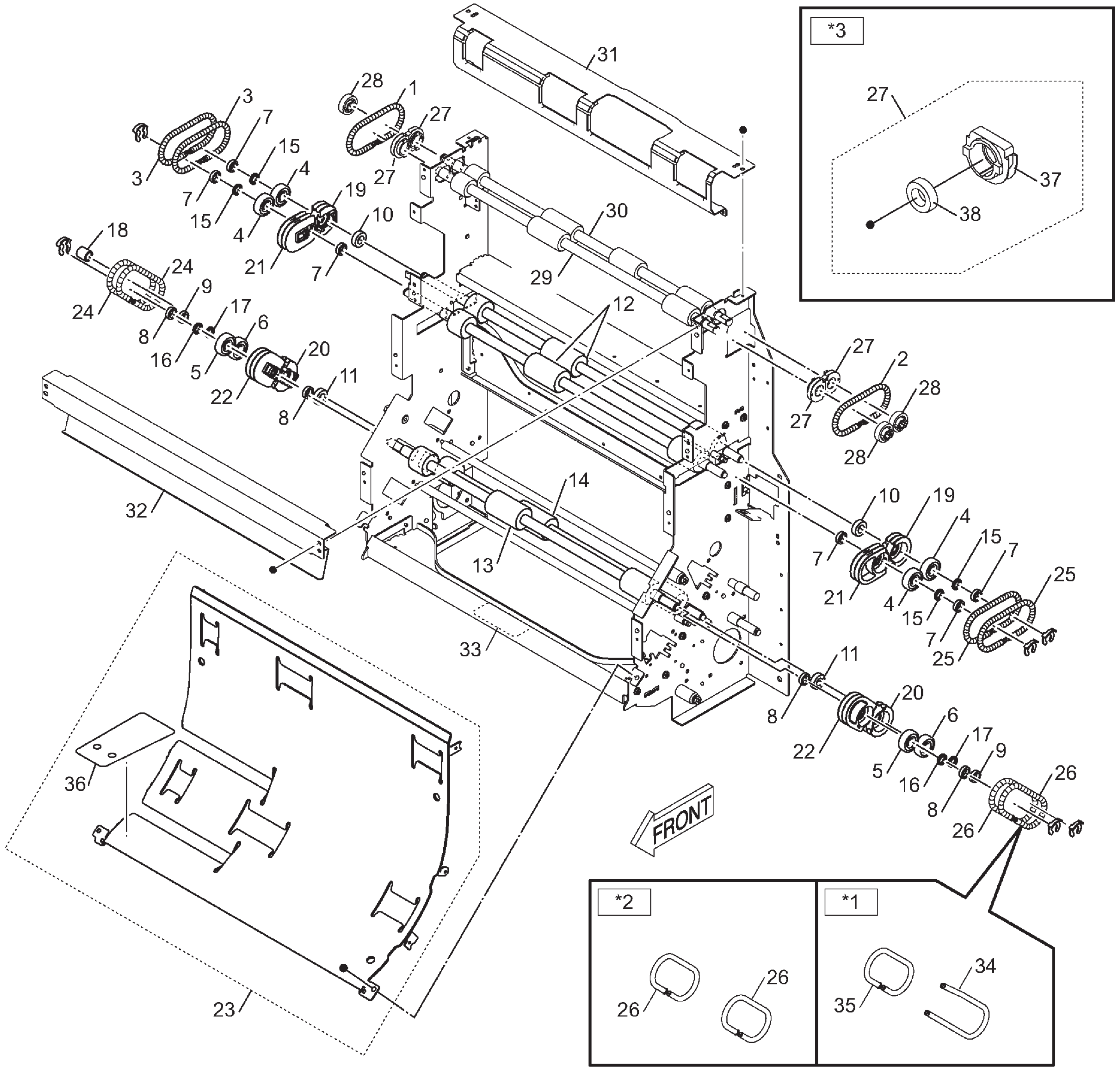
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	388N2458A	引張りコイルバネ	Extension Spring	1	L ≒ 62mm		☞{MC:7.23}
D	2	388N2524A	引張りコイルバネ	Extension Spring	1	L ≒ 80mm		☞{MC:7.23}
D	3	388N2546	引張りコイルバネ	Extension Spring	2	L ≒ 138mm		☞{MC:7.25}
D	4	322SF230	ころがり軸受	Ball Bearing	4			☞{MC:7.25}
D	5	322SF230	ころがり軸受	Ball Bearing	2			☞{MC:7.26}
D	6	322SF230	ころがり軸受	Ball Bearing	2			☞{MC:7.27}
D	7	322SP205	ころがり軸受	Ball Bearing	6			☞{MC:7.25}
D	8	322SP205	ころがり軸受	Ball Bearing	4			☞{MC:7.26}
D	9	322SP205	ころがり軸受	Ball Bearing	2			☞{MC:7.27}
D	10	322SP206	ころがり軸受	Ball Bearing	2			☞{MC:7.25}
D	11	322SP206	ころがり軸受	Ball Bearing	2			☞{MC:7.27}
D	12	334N3581B	ゴムローラ	Rubber Roller	2			☞{MC:7.25}
D	13	334N3582B	ゴムローラ	Rubber Roller	1			☞{MC:7.26}
D	14	334N3582B	ゴムローラ	Rubber Roller	1			☞{MC:7.27}
E	15	347N1624A	スペーサ	Spacer	4			☞{MC:7.25}
E	16	347N1624A	スペーサ	Spacer	2			☞{MC:7.26}
E	17	347N1624A	スペーサ	Spacer	2			☞{MC:7.27}
E	18	347N1846	スペーサ	Spacer	1			☞{MC:7.27}
D	19	360N0476	ハウジング	Housing	2			☞{MC:7.25}
D	20	360N0476	ハウジング	Housing	2			☞{MC:7.27}
D	21	360N0479	ハウジング	Housing	2			☞{MC:7.25}
D	22	360N0479	ハウジング	Housing	2			☞{MC:7.26}
D	23	363Y0488A/B	ガイド	Guide	1			☞{MC:7.28}
D	24	388N2536A	引張りコイルバネ	Extension Spring	2	L ≒ 117mm		☞{MC:7.26}
D	25	388N2537A	引張りコイルバネ	Extension Spring	2	L ≒ 159mm		☞{MC:7.25}
D	26	388N2537A	引張りコイルバネ	Extension Spring	2	L ≒ 159mm	*2	☞{MC:7.26}
D	27	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*3	#20001or later	☞{MC:7.23}
D	28	327N1121608A	平歯車	Spur Gear	3			☞{MC:7.23}
D	29	334N3577A	ゴムローラ	Rubber Roller	1			☞{MC:7.23}
D	30	334N3578A	ゴムローラ	Rubber Roller	1			☞{MC:7.24}
D	31	363Y0453	ガイド	Guide	1			☞{MC:7.24}
D	32	363Y0462	ガイド	Guide	1			☞{MC:7.23}
E	33	405N0186	銘板	Label	1			–
D	34	388N2472B	引張りコイルバネ	Extension Spring	1	L ≒ 162mm	*1	☞{MC:7.26}
D	35	388N2521	引張りコイルバネ	Extension Spring	1	L ≒ 145mm	*1	☞{MC:7.26}
D	36	384N0103	テープ	Tape	1			☞{MC:7.31}
D	37	360N0475A	ハウジング	Housing	4			☞{MC:7.23}
D	38	322SB052	ころがり軸受	Ball Bearing	4			☞{MC:7.23}

*1: #20001, #20009, #20011, #20013, and #20024 or later

*2: Except *1

*3: REF.27 交換時、部品在庫が無い場合は、REF.37 と REF.38 を手配すること。

*3: If there is no REF.27 in stock for replacement , use REF.37 and REF.38.



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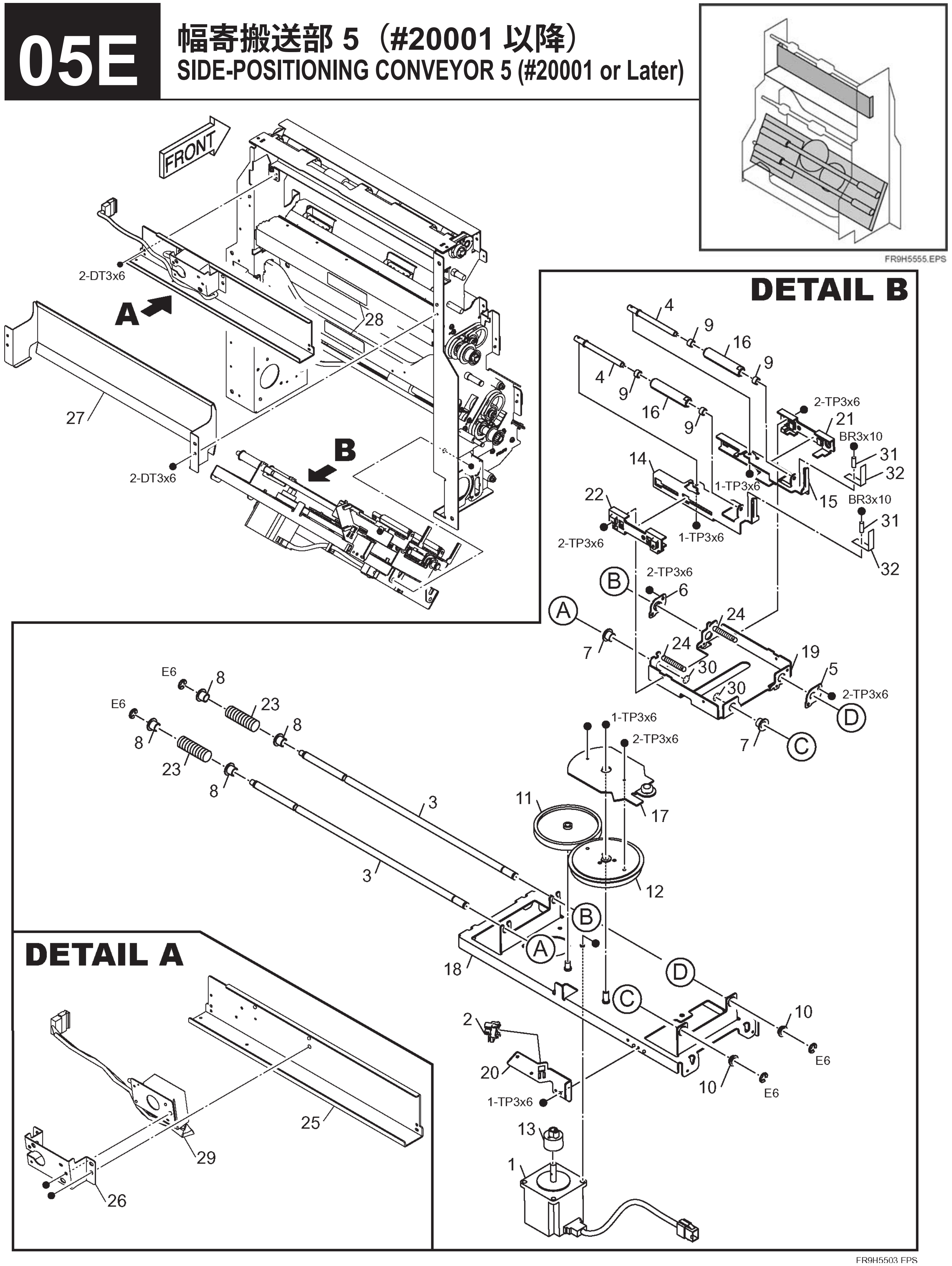
05E 幅寄搬送部 5（#20001 以降）
SIDE-POSITIONING CONVEYOR 5 (#20001 or Later)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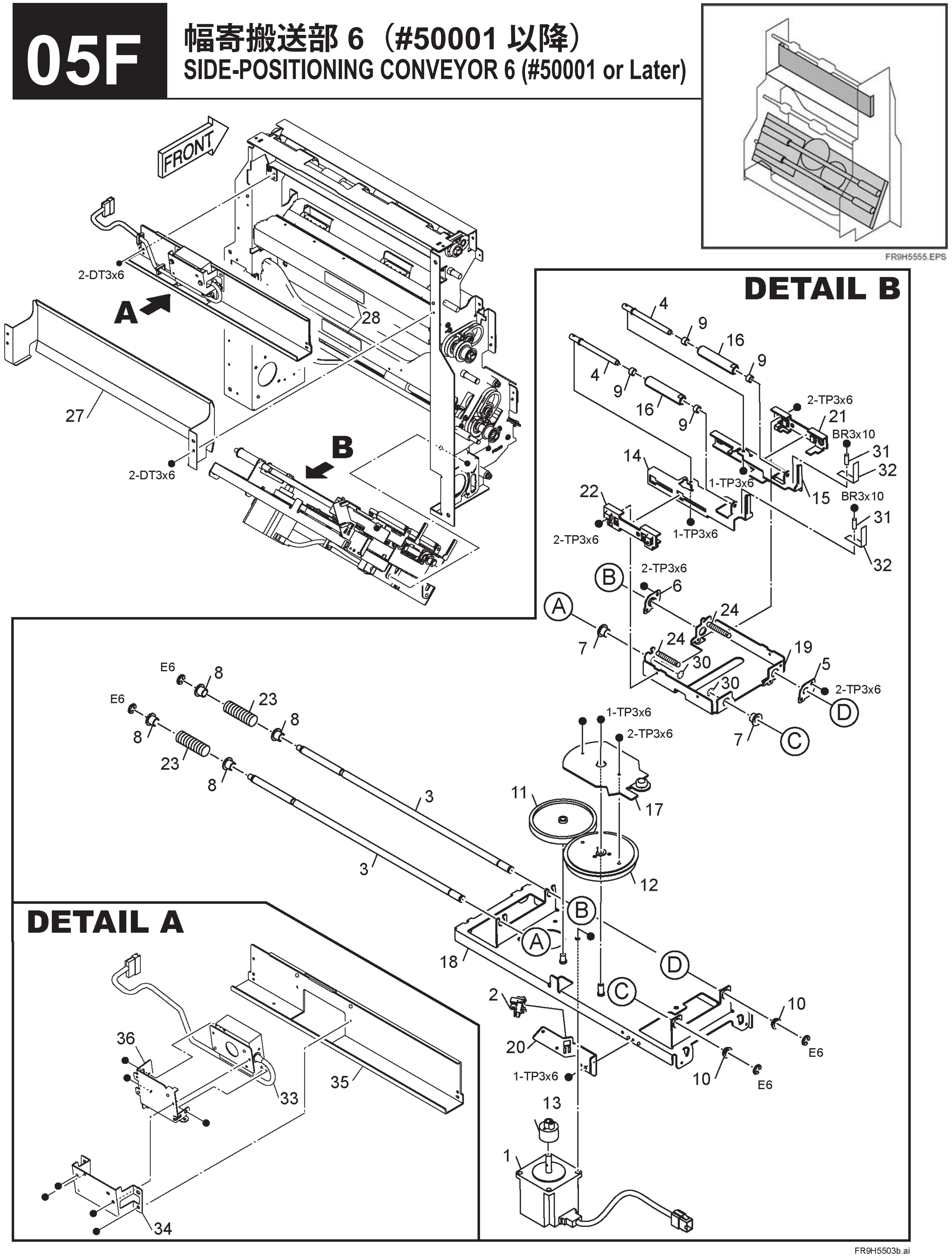
幅寄搬送部 5（#20001 以降）
SIDE-POSITIONING CONVEYOR 5 (#20001 or Later) 05E

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	118SX164/A	パルスモータ	Stepping Motor	1	MC1		☞{MC:7.8}
D	2	146S0029/A	ホトインタラプタ	Photo Sensor	1	SC1		☞{MC:7.2}
E	3	319N3623C	軸	Shaft	2			☞{MC:7.13}
E	4	319N3939A	軸	Shaft	2			☞{MC:7.13}
D	5	322N0050	軸受	Bearing	1			☞{MC:7.13}
D	6	322N0051	軸受	Bearing	1			☞{MC:7.13}
D	7	322N0052	軸受	Bearing	2			☞{MC:7.13}
D	8	322SY063	すべり軸受	Plain Bearing	4			☞{MC:7.13}
D	9	322SY093	すべり軸受	Plain Bearing	4			☞{MC:7.13}
D	10	322SY232	すべり軸受	Plain Bearing	2			☞{MC:7.13}
D	11	327N0139B	平歯車	Spur Gear	1			☞{MC:7.12}
D	12	327N0140A	平歯車	Spur Gear	1			☞{MC:7.12}
D	13	327N0173A	平歯車	Spur Gear	1			☞{MC:7.8}
D	14	328N0050C	爪	Claw	1			☞{MC:7.13}
D	15	328N0051C	爪	Claw	1			☞{MC:7.13}
D	16	334N0041A	ローラ	Roller	2			☞{MC:7.13}
E	17	341N1065B	アーム	Arm	1			☞{MC:7.12}
E	18	353N0082A	シャーシ	Chassis	1			☞{MC:7.12}
E	19	356N8926B	ブラケット	Bracket	1			☞{MC:7.13}
E	20	356N9164A	ブラケット	Bracket	1			☞{MC:7.2}
D	21	363N2073B	ガイド	Guide	1			☞{MC:7.13}
D	22	363N2115	ガイド	Guide	1			☞{MC:7.13}
D	23	388N1223	圧縮コイルバネ	Compression Coil Spring	2	L ≒ 57mm		☞{MC:7.13}
D	24	388N2447B	引張りコイルバネ	Extension Spring	2	L ≒ 33mm		☞{MC:7.13}
E	25	356N9156C	ブラケット	Bracket	1		#20001 or later	☞{MC:4.7}
E	26	356N9191	ブラケット	Bracket	1		#20001 or later	☞{MC:4.7}
D	27	363Y0461	ガイド	Guide	1			–
E	28	405N0186	銘板	Label	2			–
D	29	852Y0074/A/B	読取り部	Bar Code Reader	1	BCRC1	#20001 or later	☞{MC:4.7}
E	30	315S0013	止め輪	Snap Ring	2			☞{MC:7.13}
D	31	347N0706	スペーサ	Spacer	2			☞{MC:7.13}
E	32	328N0053B	爪	Claw	2			☞{MC:7.13}

05F 幅寄搬送部 6（#50001 以降）
SIDE-POSITIONING CONVEYOR 6 (#50001 or Later)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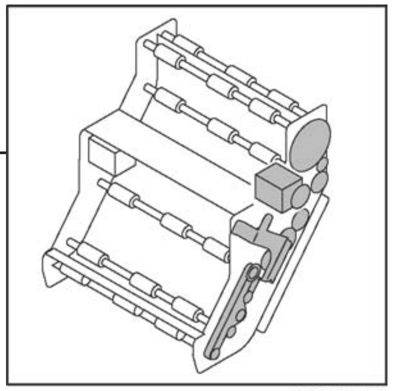
幅寄搬送部 6（#50001 以降）
SIDE-POSITIONING CONVEYOR 6 (#50001 or Later)
05F

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	118SX164/A	パルスモータ	Stepping Motor	1	MC1		☞{MC:7.8}
D	2	146S0029/A	ホトインタラプタ	Photo Sensor	1	SC1		☞{MC:7.2}
E	3	319N3623C	軸	Shaft	2			☞{MC:7.13}
E	4	319N3939A	軸	Shaft	2			☞{MC:7.13}
D	5	322N0050	軸受	Bearing	1			☞{MC:7.13}
D	6	322N0051	軸受	Bearing	1			☞{MC:7.13}
D	7	322N0052	軸受	Bearing	2			☞{MC:7.13}
D	8	322SY063	すべり軸受	Plain Bearing	4			☞{MC:7.13}
D	9	322SY093	すべり軸受	Plain Bearing	4			☞{MC:7.13}
D	10	322SY232	すべり軸受	Plain Bearing	2			☞{MC:7.13}
D	11	327N0139B	平歯車	Spur Gear	1			☞{MC:7.12}
D	12	327N0140A	平歯車	Spur Gear	1			☞{MC:7.12}
D	13	327N0173A	平歯車	Spur Gear	1			☞{MC:7.8}
D	14	328N0050C	爪	Claw	1			☞{MC:7.13}
D	15	328N0051C	爪	Claw	1			☞{MC:7.13}
D	16	334N0041A	ローラ	Roller	2			☞{MC:7.13}
E	17	341N1065B	アーム	Arm	1			☞{MC:7.12}
E	18	353N0082A	シャーシ	Chassis	1			☞{MC:7.12}
E	19	356N8926B	ブラケット	Bracket	1			☞{MC:7.13}
E	20	356N9164A	ブラケット	Bracket	1			☞{MC:7.2}
D	21	363N2073B	ガイド	Guide	1			☞{MC:7.13}
D	22	363N2115	ガイド	Guide	1			☞{MC:7.13}
D	23	388N1223	圧縮コイルバネ	Compression Coil Spring	2	L ≒ 57mm		☞{MC:7.13}
D	24	388N2447B	引張りコイルバネ	Extension Spring	2	L ≒ 33mm		☞{MC:7.13}
	25	***						
	26	***						
D	27	363Y0461	ガイド	Guide	1			–
E	28	405N0186	銘板	Label	2			–
	29	***						
E	30	315S0013	止め輪	Snap Ring	2			☞{MC:7.13}
D	31	347N0706	スペーサ	Spacer	2			☞{MC:7.13}
E	32	328N0053B	爪	Claw	2			☞{MC:7.13}
D	33	852Y100043	読取り部	Bar Code Reader	1	BCRC1	#50001 or later	☞{MC:4.7}
E	34	356N103880B	ブラケット	Bracket	1		#50001 or later	☞{MC:4.7}
E	35	356N103879A	ブラケット	Bracket	1		#50001 or later	☞{MC:4.7}
E	36	356N103849	ブラケット	Bracket	1		#50001 or later	☞{MC:4.7}

06A 後搬送部 1
AFTER SCANNING CONVEYOR 1



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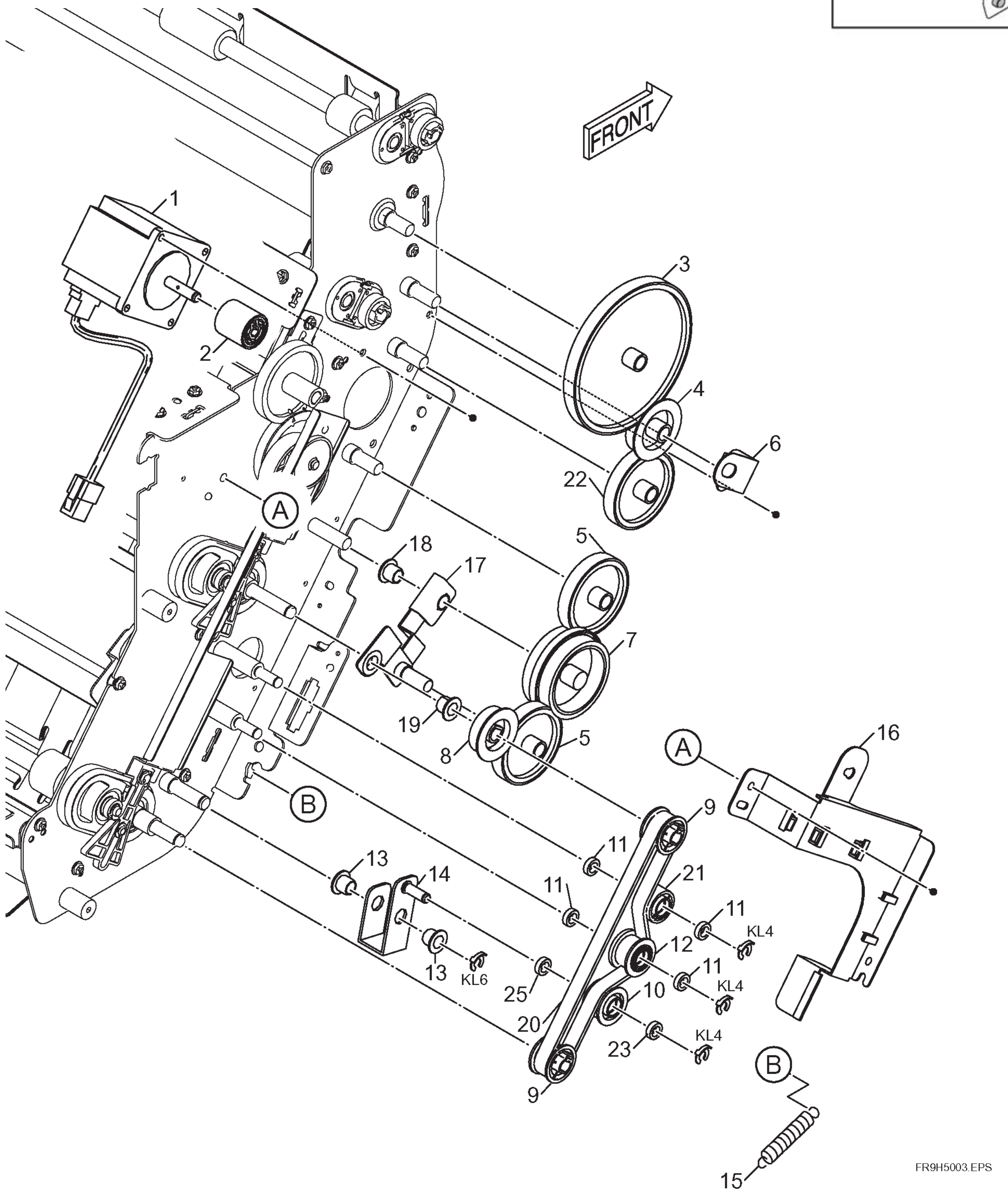

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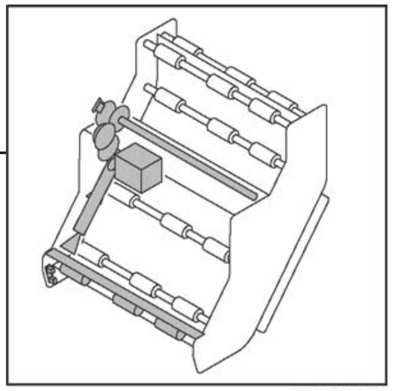
後搬送部 1
AFTER SCANNING CONVEYOR 1 06A

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	118SX063/A	パルスモータ	Stepping Motor	1	MD2		☞{MC:8.13}
D	2	327N1121610A	平歯車	Spur Gear	1			☞{MC:8.13}
D	3	327N1127201A	平歯車	Spur Gear	1			☞{MC:8.12}
D	4	327N0197	平歯車	Spur Gear	1			☞{MC:8.12}
D	5	327N1123601B	平歯車	Spur Gear	2			☞{MC:8.7}
E	6	356N9118	ブラケット	Bracket	1			☞{MC:8.12}
D	7	327N0199	平歯車	Spur Gear	1			☞{MC:8.7}
D	8	327N0198	平歯車	Spur Gear	1			☞{MC:8.7}
D	9	324N3164A	タイミングベルト車	Timing Belt Pulley	2			☞{MC:8.3}
D	10	324N1026A	平ベルト車	Flat Belt Wheel	1			☞{MC:8.3}
D	11	322SP203	ころがり軸受	Ball Bearing	4			☞{MC:8.3}
D	12	324N3098A/B	タイミングベルト車	Timing Belt Pulley	1			☞{MC:8.3}
D	13	322SY063	すべり軸受	Plain Bearing	2			☞{MC:8.2}
E	14	341N1061	アーム	Arm	1			☞{MC:8.2}
D	15	388N2525	引張りコイルバネ	Extension Spring	1	L ≒ 40mm		☞{MC:8.2}
E	16	356N9162	ブラケット	Bracket	1			☞{MC:8.7}
E	17	342N0109	レバー	Lever	1			☞{MC:8.7}
D	18	322SY059	すべり軸受	Plain Bearing	1			☞{MC:8.7}
D	19	322SY122	すべり軸受	Plain Bearing	1			☞{MC:8.7}
D	20	323S3271	タイミングベルト	Timing Belt	1			☞{MC:8.3}
D	21	324N1032A	平ベルト車	Flat Belt Wheel	1			☞{MC:8.3}
D	22	327N1123601B	平歯車	Spur Gear	1			☞{MC:8.12}
D	23	322SP203	ころがり軸受	Ball Bearing	2			☞{MC:8.2}

06B 後搬送部 2 AFTER SCANNING CONVEYOR 2



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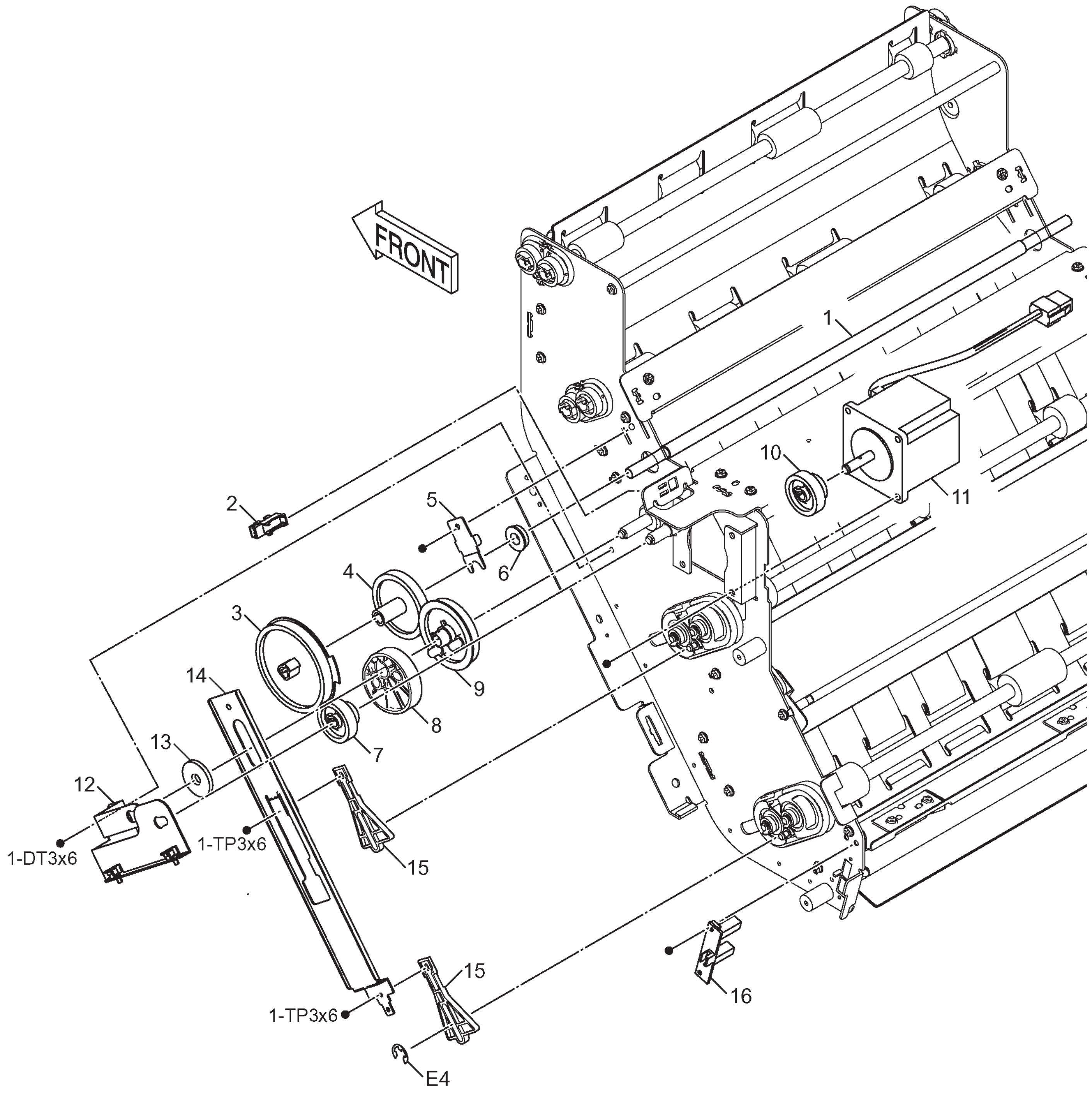
後搬送部 2
AFTER SCANNING CONVEYOR 2 06B

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	319N3969A	軸	Shaft	1			☞{MC:8.21}
D	2	146S0029/A	ホトインタラプタ	Photo Sensor	1	SD1		☞{MC:8.5}
D	3	327N0143C	平歯車	Spur Gear	1			☞{MC:8.4}
D	4	327N0195A	平歯車	Spur Gear	1			☞{MC:8.21}
D	5	356N9165	ブラケット	Bracket	1			☞{MC:8.21}
D	6	322SP214	ころがり軸受	Ball Bearing	1			☞{MC:8.21}
D	7	327S1103002A	平歯車	Spur Gear	1			☞{MC:8.4}
D	8	329N0158A	カム	Cam	1			☞{MC:8.21}
D	9	327N0196B	平歯車	Spur Gear	1			☞{MC:8.21}
D	10	327N0189A	平歯車	Spur Gear	1			☞{MC:8.9}
D	11	118SX167/A	パルスモータ	Stepping Motor	1	MD1		☞{MC:8.9}
E	12	356N9117B	ブラケット	Bracket	1			☞{MC:8.4}
E	13	347N1834	スペーサ	Spacer	1			☞{MC:8.6}
E	14	342N0130	レバー	Lever	1			☞{MC:8.6}
D	15	329N0148B	カム	Cam	2			☞{MC:8.6}
D	16.1	113Y1466	ボードアセンブリ	Board Assembly	1	SD2		☞{MC:8.10}
D	16.2	146N0016B	フォトインタラプタ	Photo Sensor	1	SD2		☞{MC:8.10}



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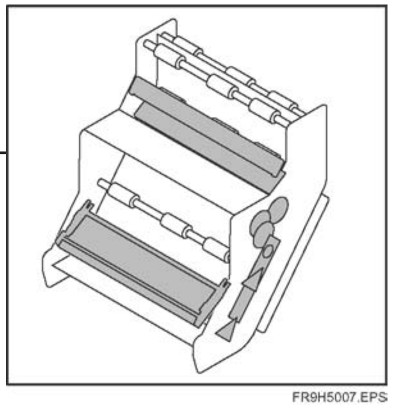
06C 後搬送部 3 AFTER SCANNING CONVEYOR 3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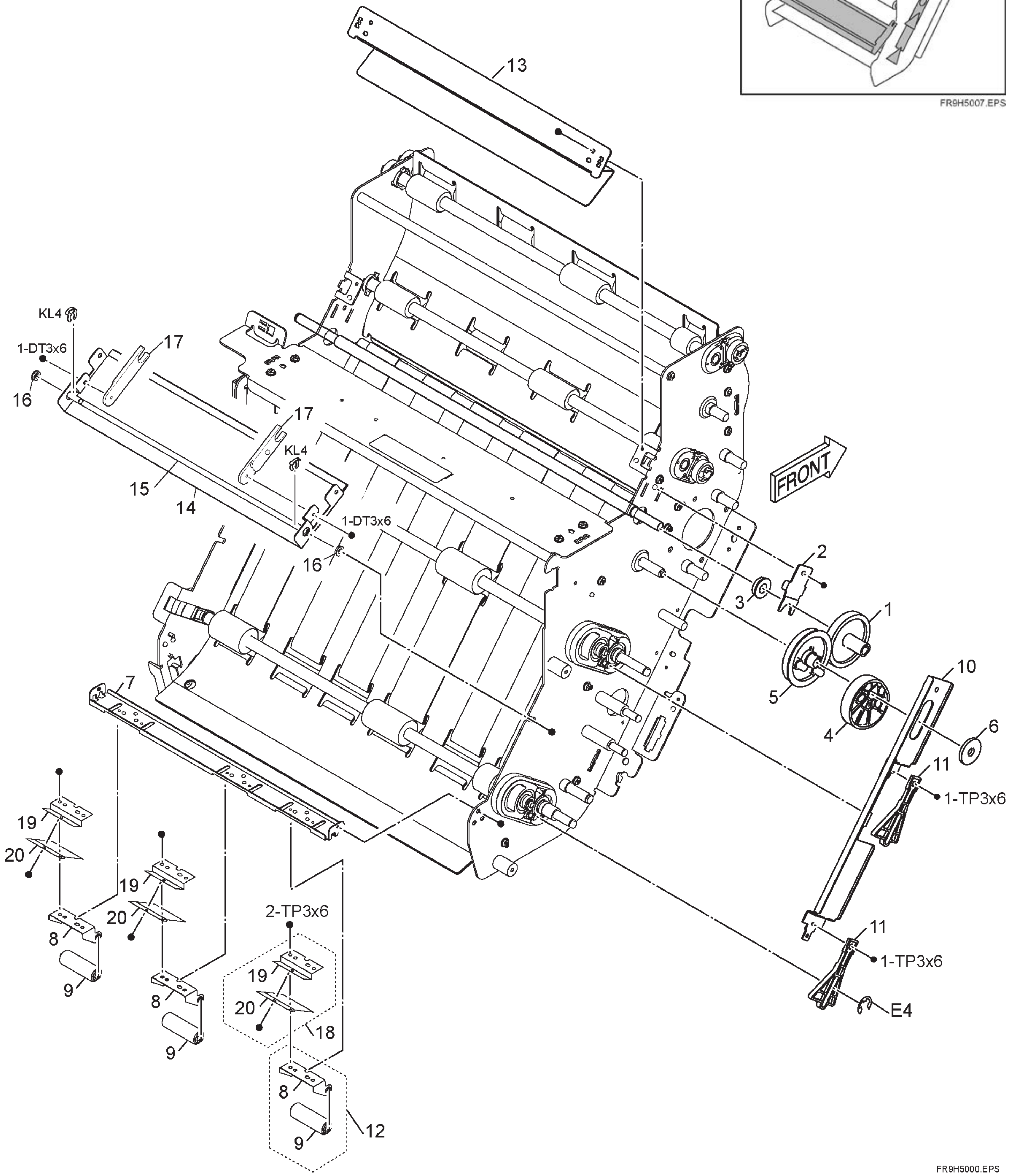
後搬送部 3
AFTER SCANNING CONVEYOR 3 06C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KL4
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1-TP3x6
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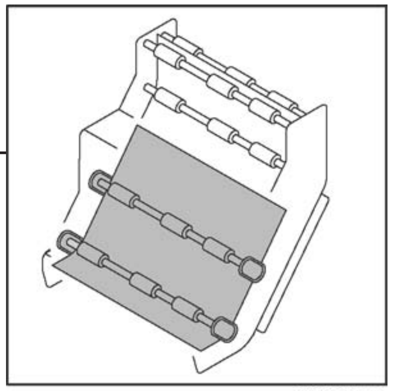
2-TP3x6
19
20
18
8
9
12
11
1-TP3x6
E4
FR9H5000.EPS

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	327N0195A	平歯車	Spur Gear	1			☞{MC:8.21}
D	2	356N9165	ブラケット	Bracket	1			☞{MC:8.21}
D	3	322SP214	ころがり軸受	Ball Bearing	1			☞{MC:8.21}
D	4	329N0158A	カム	Cam	1			☞{MC:8.21}
D	5	327N0196B	平歯車	Spur Gear	1			☞{MC:8.21}
E	6	347N1834	スペーサ	Spacer	1			☞{MC:8.8}
E	7	356N9111	ブラケット	Bracket	1			☞{MC:8.11}
D	8	388N5269	板バネ	Leaf Spring	3			☞{MC:8.11}
D	9	334N3580B	樹脂ローラ	Resin Roller	3			☞{MC:8.11}
E	10	342N0131	レバー	Lever	1			☞{MC:8.8}
D	11	329N0149A	カム	Cam	2			☞{MC:8.8}
D	12	334Y2244A	樹脂ローラアセンブリ	Resin Roller Assembly	3			☞{MC:8.11}
D	13	363N2535B	ガイド板	Guide Plate	1			☞{MC:8.17}
D	14	363Y0494	ガイド板	Guide Plate	1			☞{MC:8.14}
E	15	319N4059B	軸	Shaft	1			☞{MC:8.14}
D	16	322SY298	すべり軸受	Plain Bearing	2			☞{MC:8.14}
E	17	341N1116B	アーム	Arm	2			☞{MC:8.14}
D	18	356Y0426	帯電防止材アセンブリ	Antistatic Brush Assembly	3			☞{MC:8.11}
E	19	356N10306	ブラケット	Bracket	3			☞{MC:8.11}
D	20	387N0131B/C	帯電防止材	Antistatic Brush	3			☞{MC:8.11}

06D 後搬送部 4
AFTER SCANNING CONVEYOR 4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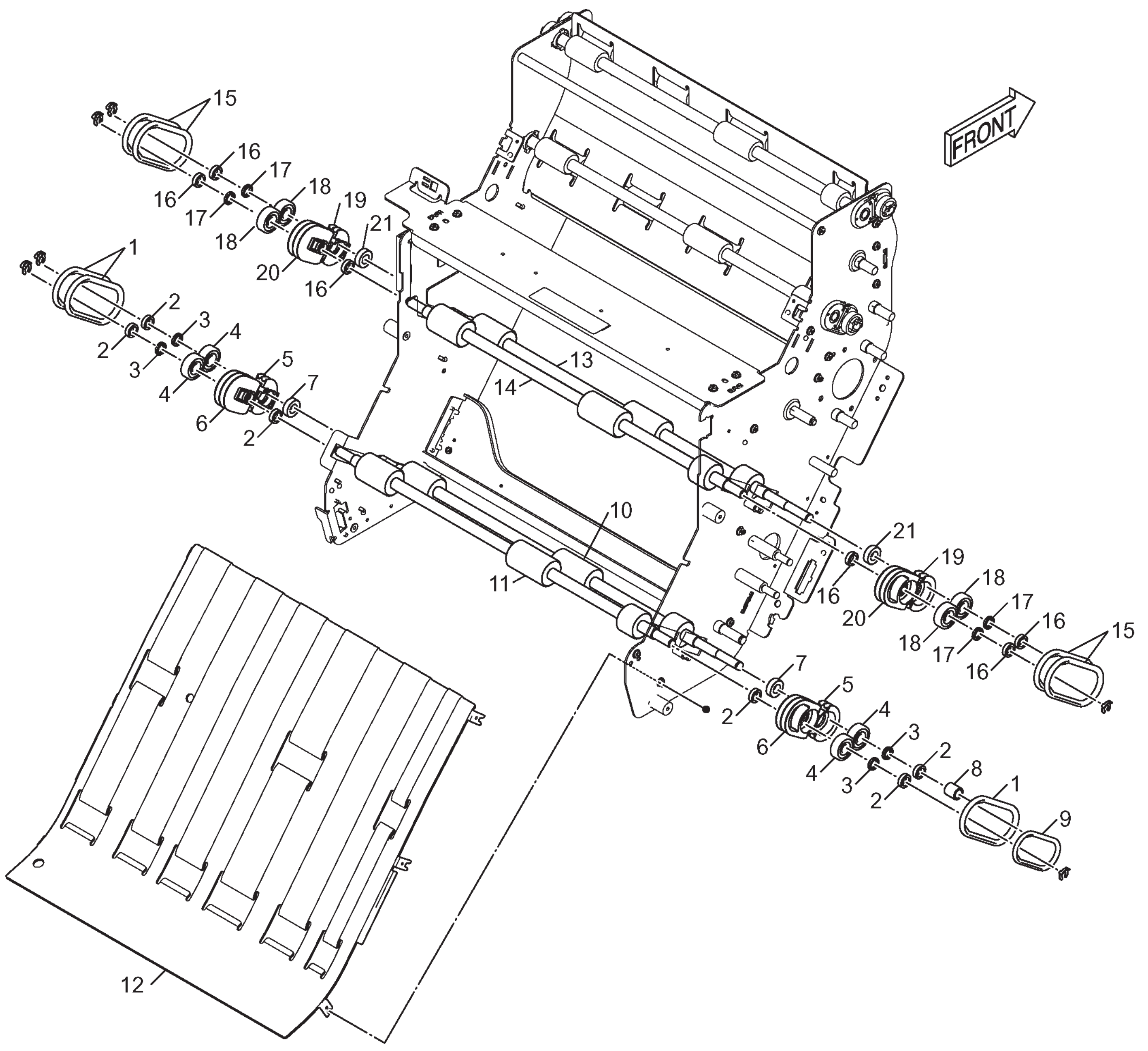
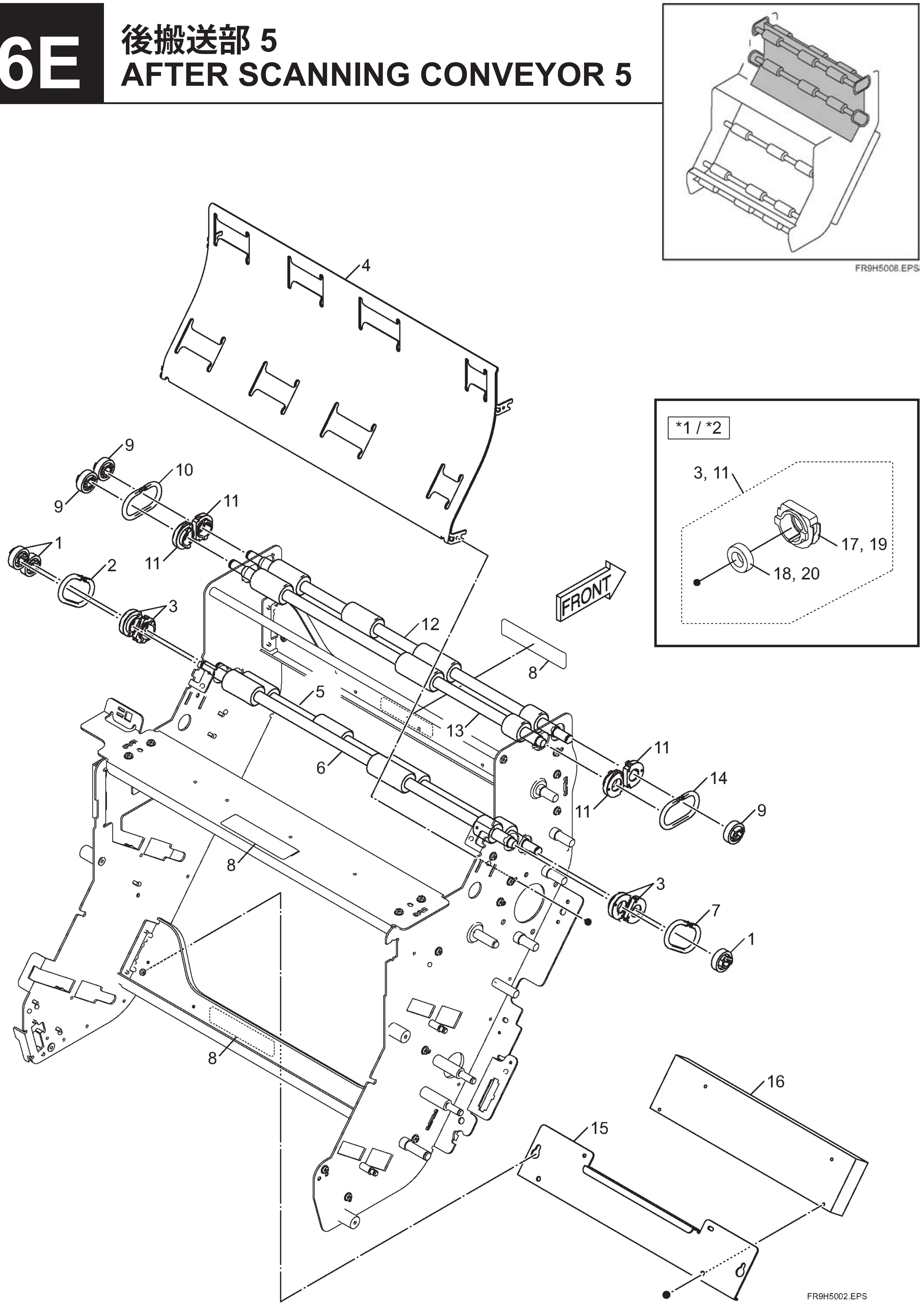


FR9H5001.EPS

後搬送部 4
AFTER SCANNING CONVEYOR 4 06D

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	388N2472B	引張りコイルバネ	Extension Spring	3	L ≒ 162mm		☞{MC:8.15}
D	2	322SP205	ころがり軸受	Ball Bearing	6			☞{MC:8.15}
E	3	347N1624A	スペーサ	Spacer	4			☞{MC:8.15}
D	4	322SF230	ころがり軸受	Ball Bearing	4			☞{MC:8.15}
D	5	360N0476	ハウジング	Housing	2			☞{MC:8.15}
D	6	360N0479	ハウジング	Housing	2			☞{MC:8.15}
D	7	322SP206	ころがり軸受	Ball Bearing	2			☞{MC:8.15}
E	8	347N1846	スペーサ	Spacer	1			☞{MC:8.15}
D	9	388N2473B	引張りコイルバネ	Extension Spring	1	L ≒ 117mm		☞{MC:8.15}
D	10	334N3581B	ゴムローラ	Rubber Roller	1			☞{MC:8.15}
D	11	334N3582B	ゴムローラ	Rubber Roller	1			☞{MC:8.15}
D	12	363Y0489/A	ガイド	Guide	1			☞{MC:8.19}
D	13	334N3581B	ゴムローラ	Rubber Roller	1			☞{MC:8.16}
D	14	334N3582B	ゴムローラ	Rubber Roller	1			☞{MC:8.16}
D	15	388N2472B	引張りコイルバネ	Extension Spring	4	L ≒ 162mm		☞{MC:8.16}
D	16	322SP205	ころがり軸受	Ball Bearing	6			☞{MC:8.16}
E	17	347N1624A	スペーサ	Spacer	4			☞{MC:8.16}
D	18	322SF230	ころがり軸受	Ball Bearing	4			☞{MC:8.16}
D	19	360N0476	ハウジング	Housing	2			☞{MC:8.16}
D	20	360N0479	ハウジング	Housing	2			☞{MC:8.16}
D	21	322SP206	ころがり軸受	Ball Bearing	2			☞{MC:8.16}

06E 後搬送部 5
AFTER SCANNING CONVEYOR 5



後搬送部 5
AFTER SCANNING CONVEYOR 5
06E

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	327N1121608A	平歯車	Spur Gear	3			☞{MC:8.17}
D	2	388N2524A	引張りコイルバネ	Extension Spring	1	L ≒ 80mm		☞{MC:8.17}
D	3	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*1	#20001or later	☞{MC:8.17}
D	4	363N2483E/F/G	ガイド	Guide	1			☞{MC:8.20}
D	5	334N3578A	ゴムローラ	Rubber Roller	1			☞{MC:8.17}
D	6	334N3577A	ゴムローラ	Rubber Roller	1			☞{MC:8.17}
D	7	388N2458A	引張りコイルバネ	Extension Spring	1	L ≒ 62mm		☞{MC:8.17}
E	8	405N0186	銘板	Label	3			–
D	9	327N1121608A	平歯車	Spur Gear	3			☞{MC:8.18}
D	10	388N2524A	引張りコイルバネ	Extension Spring	1	L ≒ 80mm		☞{MC:8.18}
D	11	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*2	#20001or later	☞{MC:8.18}
D	12	334N3578A	ゴムローラ	Rubber Roller	1			☞{MC:8.18}
D	13	334N3577A	ゴムローラ	Rubber Roller	1			☞{MC:8.18}
D	14	388N2458A	引張りコイルバネ	Extension Spring	1	L ≒ 62mm		☞{MC:8.18}
E	15	356N9421A	ブラケット	Bracket	1			–
E	16	390N0039A/B	バランサー	Balancer	1			–
D	17	360N0475A	ハウジング	Housing	4			☞{MC:8.17}
D	18	322SB052	ころがり軸受	Ball Bearing	4			☞{MC:8.17}
D	19	360N0475A	ハウジング	Housing	4			☞{MC:8.18}
D	20	322SB052	ころがり軸受	Ball Bearing	4			☞{MC:8.18}

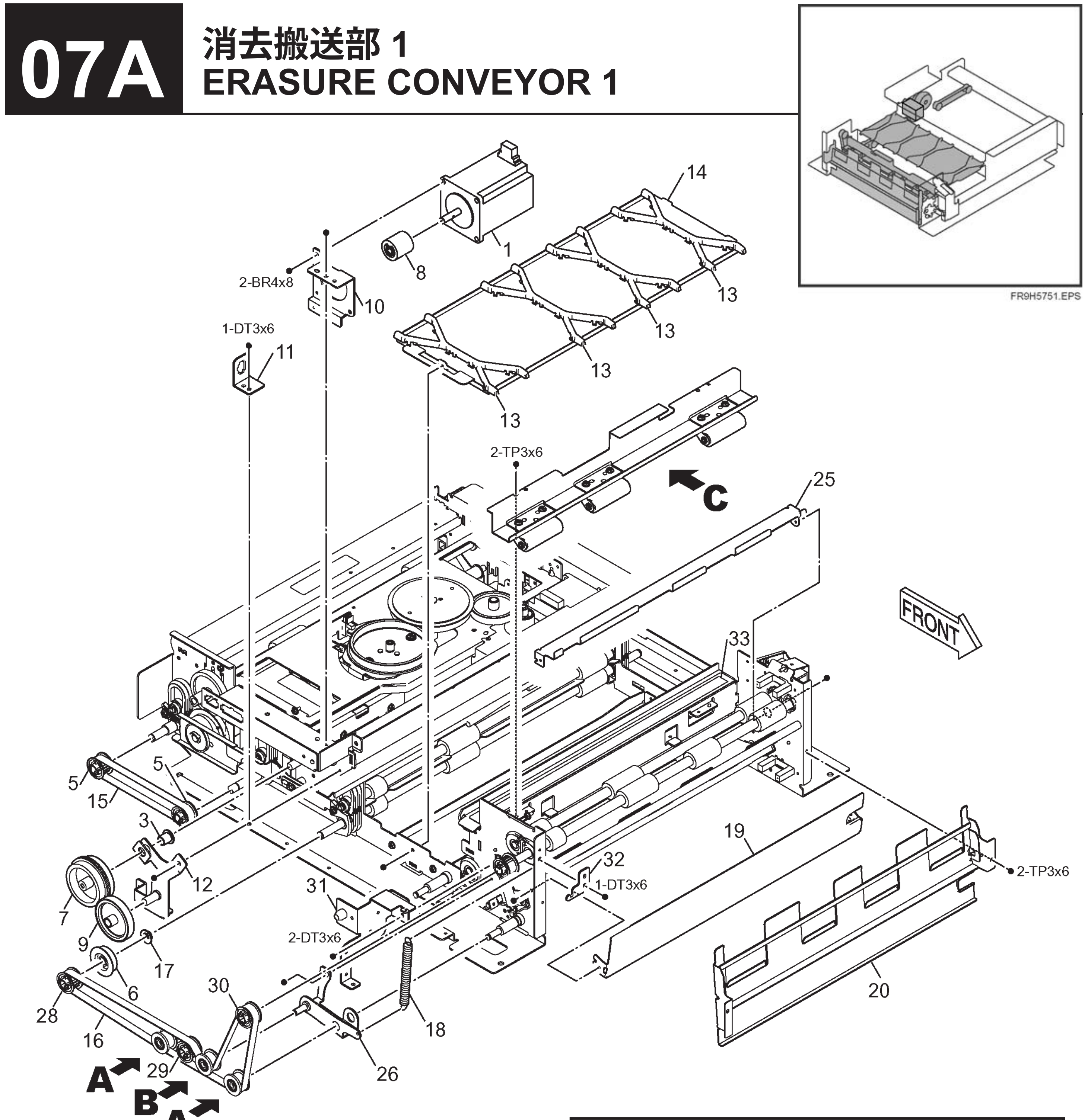
*1: REF.3 交換時、部品在庫が無い場合は、REF.17 と REF.18 を手配すること。

*1: If there is no REF.3 in stock for replacement , use REF.17 and REF.18.

*2: REF.11 交換時、部品在庫が無い場合は、REF.19 と REF.20 を手配すること。

*2: If there is no REF.11 in stock for replacement , use REF.19 and REF.20.

07A 消去搬送部 1
ERASURE CONVEYOR 1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FRONT
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31
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32
1-DT3x6
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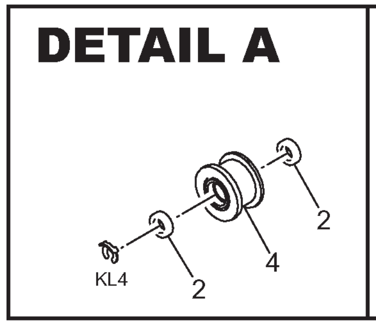
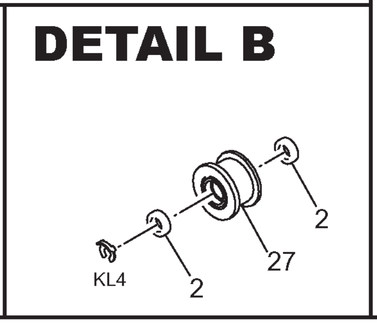
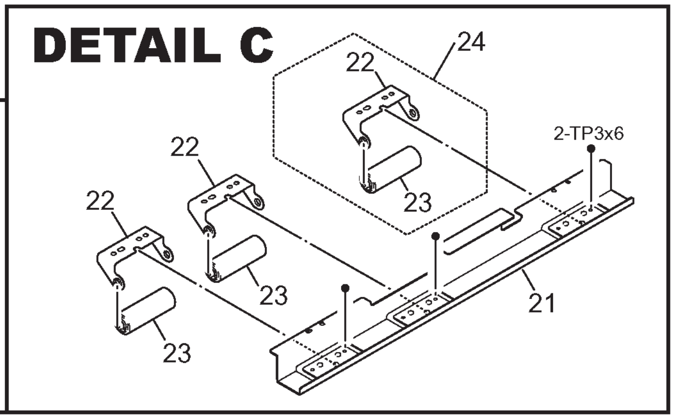

DETAIL A


DETAIL B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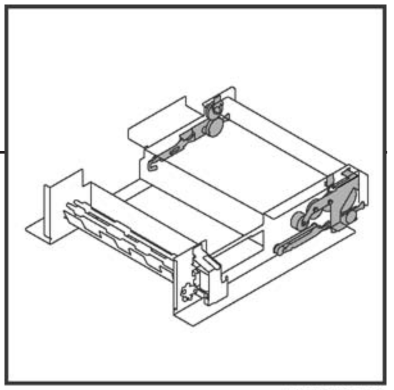
FR9H5712.EPS

消去搬送部 1
ERASURE CONVEYOR 1
07A

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	118SX063/A	パルスモータ	Stepping Motor	1	ME1		☞{MC:9.37}
D	2	322SP203	ころがり軸受	Ball Bearing	6			☞{MC:9.31}
D	3	322SY059	すべり軸受	Plain Bearing	1			☞{MC:9.30}
D	4	324N3098A/B	タイミングベルト車	Timing Belt Pulley	2			☞{MC:9.31}
D	5	324N3164A	タイミングベルト車	Timing Belt Pulley	2			☞{MC:9.27}
D	6	327N0198	平歯車	Spur Gear	1			☞{MC:9.28}
D	7	327N0199	平歯車	Spur Gear	1			☞{MC:9.28}
D	8	327N1121610A	平歯車	Spur Gear	1			☞{MC:9.37}
D	9	327N1123601B	平歯車	Spur Gear	1			☞{MC:9.28}
E	10	356N9281	ブラケット	Bracket	1			☞{MC:9.37}
E	11	356N9292A	ブラケット	Bracket	1			–
E	12	356N9346	ブラケット	Bracket	1			☞{MC:9.30}
D	13	363N2476B	ガイド	Guide	4			☞{MC:9.24}
D	14	407Y0027/A	反射板ガイド	Reflective Plate	1			☞{MC:9.24}
D	15	323S3097	タイミングベルト	Timing Belt	1			☞{MC:9.27}
D	16	323S3223	タイミングベルト	Timing Belt	1			☞{MC:9.26}
D	17	322SY122	すべり軸受	Plain Bearing	1			☞{MC:9.28}
D	18	388N2545	引張りコイルバネ	Extension Spring	1	L ≒ 61mm		☞{MC:9.26}
D	19	363Y0468A	ガイド	Guide	1			☞{MC:9.33}
D	20	363Y0467A	ガイド	Guide	1			–
E	21	356N9235D	ブラケット	Bracket	1			☞{MC:9.22}
D	22	388N5269	板バネ	Leaf Spring	3			☞{MC:9.22}
D	23	334N3580B	樹脂ローラ	Resin Roller	3			☞{MC:9.22}
D	24	334Y2244A	樹脂ローラアセンブリ	Resin Roller Assembly	3			☞{MC:9.22}
D	25	363Y0480	ガイド	Guide	1			☞{MC:9.34}
E	26	356N9348	ブラケット	Bracket	1			☞{MC:9.31}
D	27	324N1026A	タイミングベルト車	Timing Belt Pulley	1			☞{MC:9.31}
D	28	324N3164A	タイミングベルト車	Timing Belt Pulley	1			☞{MC:9.28}
D	29	324N3164A	タイミングベルト車	Timing Belt Pulley	1			☞{MC:9.26}
D	30	324N3164A	タイミングベルト車	Timing Belt Pulley	1			☞{MC:9.41}
E	31	356N9260B	ブラケット	Bracket	1			–
E	32	356N9442	ブラケット	Bracket	1			–
D	33	382N1634	テープ	Tape	1			–

07B 消去搬送部 2 ERASURE CONVEYOR 2



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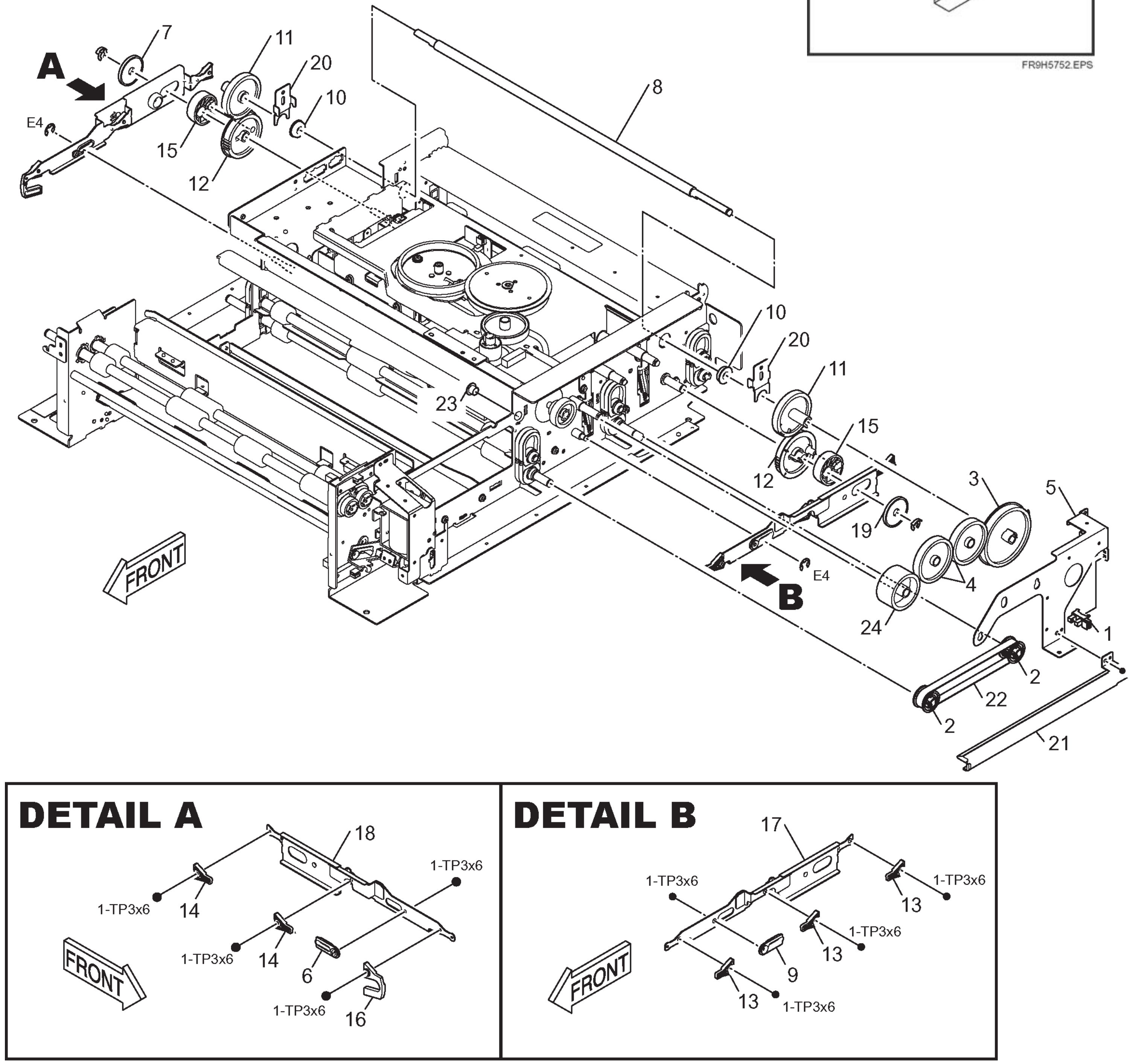
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B
E4
DETAIL A
18
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1-TP3x6
14
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FRONT
DETAIL B
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9
13
1-TP3x6
FRONT

FR9H5713.EPS

消去搬送部 2 ERASURE CONVEYOR 2 07B

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	146S0029/A	ホトインタラプタ	Photo Sensor	1	SE5		☞{MC:9.21}
D	2	324N3164A	タイミングベルト車	Timing Belt Pulley	2			☞{MC:9.25}
D	3	327N0143C	平歯車	Spur Gear	1			☞{MC:9.29}
D	4	327N0194	平歯車	Spur Gear	2			☞{MC:9.29}
E	5	356N9291B	ブラケット	Bracket	1			☞{MC:9.20}
D	6	322N2003A	すべり軸受	Plain Bearing	1			☞{MC:9.30}
E	7	347N1834	スペーサ	Spacer	1			☞{MC:9.30}
E	8	319N3969A	軸	Shaft	1			☞{MC:9.45}
D	9	322N2003A	すべり軸受	Plain Bearing	1			☞{MC:9.29}
D	10	322SP214	ころがり軸受	Ball Bearing	2			☞{MC:9.45}
D	11	327N0195A	平歯車	Spur Gear	2			☞{MC:9.45}
D	12	327N0196B	平歯車	Spur Gear	2			☞{MC:9.45}
D	13	329N0159A	カム	Cam	3			☞{MC:9.29}
D	14	329N0160B	カム	Cam	2			☞{MC:9.30}
D	15	329N0161B	カム	Cam	2			☞{MC:9.45}
D	16	329N0170	カム	Cam	1			☞{MC:9.30}
E	17	342Y0023A	レバー	Lever	1			☞{MC:9.29}
E	18	342Y0024A	レバー	Lever	1			☞{MC:9.30}
E	19	347N1834	スペーサ	Spacer	1			☞{MC:9.29}
E	20	356N9165	ブラケット	Bracket	2			☞{MC:9.45}
E	21	350N2835A	カバー	Cover	1			☞{MC:9.20}
D	22	323S3097	タイミングベルト	Timing Belt	1			☞{MC:9.25}
D	23	322SY065	すべり軸受	Plain Bearing	1			☞{MC:9.1}
D	24	327N1103802	平歯車	Spur Gear	1			☞{MC:9.29}

07C 消去搬送部 3 ERASURE CONVEYOR 3

A
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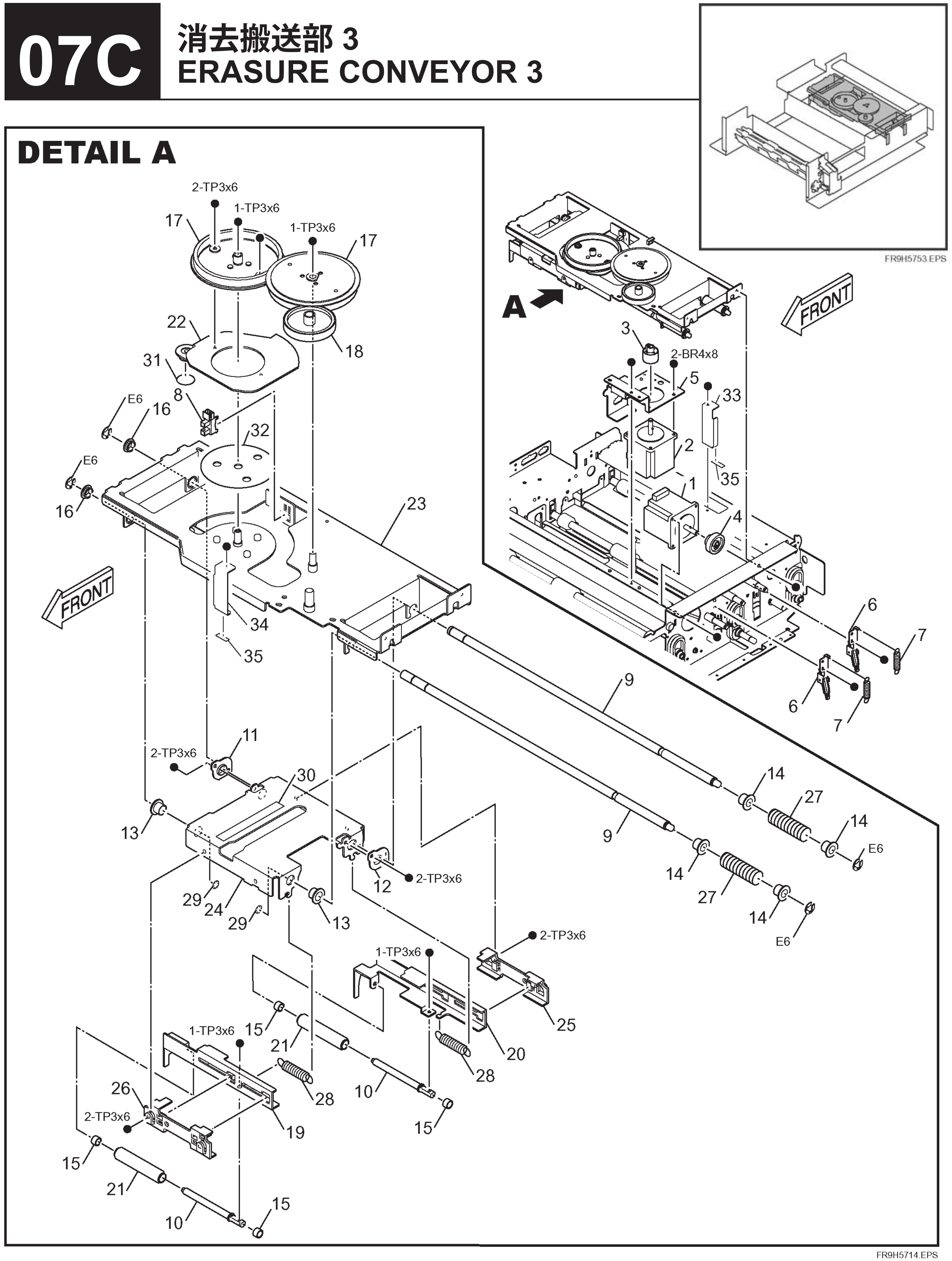
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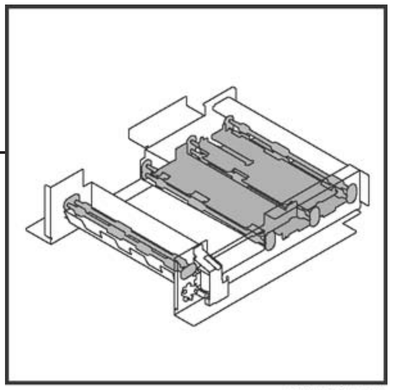
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	118SX167/A	パルスモータ	Stepping Motor	1	ME3		☞{MC:9.39}
D	2	118SX167/A	パルスモータ	Stepping Motor	1	ME2		☞{MC:9.38}
D	3	327N0173A	平歯車	Spur Gear	1			☞{MC:9.38}
D	4	327N0189A	平歯車	Spur Gear	1			☞{MC:9.39}
E	5	356N9261C	ブラケット	Bracket	1			☞{MC:9.38}
D	6	363Y0482A	ガイド	Guide	2			☞{MC:9.36}
D	7	388N2448A	引張りコイルバネ	Extension Spring	2	L ≒ 36mm		☞{MC:9.36}
D	8	146S0029/A	ホトインタラプタ	Photo Sensor	1	SE4		☞{MC:9.19}
E	9	319N3623C	軸	Shaft	2			☞{MC:9.35}
E	10	319N3939A	軸	Shaft	2			☞{MC:9.35}
D	11	322N0050	軸受	Bearing	1			☞{MC:9.35}
D	12	322N0051	軸受	Bearing	1			☞{MC:9.35}
D	13	322N0052	軸受	Bearing	2			☞{MC:9.35}
D	14	322SY063	すべり軸受	Plain Bearing	4			☞{MC:9.35}
D	15	322SY093	すべり軸受	Plain Bearing	4			☞{MC:9.35}
D	16	322SY232	すべり軸受	Plain Bearing	2			☞{MC:9.35}
D	17	327N0140A	平歯車	Spur Gear	2			☞{MC:9.35}
D	18	327N0194	平歯車	Spur Gear	1			☞{MC:9.35}
D	19	328N0041C	爪	Claw	1			☞{MC:9.35}
D	20	328N0052	爪	Claw	1			☞{MC:9.35}
D	21	334N0041A	ローラ	Roller	2			☞{MC:9.35}
E	22	341Y0324A	アーム	Arm	1			☞{MC:9.35}
E	23	353N0090B	シャーシ	Chassis	1			☞{MC:9.35}
E	24	356N8926B	ブラケット	Bracket	1			☞{MC:9.35}
D	25	363N2073B	ガイド	Guide	1			☞{MC:9.35}
D	26	363N2115	ガイド	Guide	1			☞{MC:9.35}
D	27	388N1223	圧縮コイルバネ	Compression Coil Spring	2	L ≒ 57mm		☞{MC:9.35}
D	28	388N2447B	引張りコイルバネ	Extension Spring	2	L ≒ 33mm		☞{MC:9.35}
D	29	315S0013	止め輪	Snap Ring	2			☞{MC:9.35}
D	30	384N0077	こすり部材	Tape	1			☞{MC:9.35}
D	31	384N0076A	こすり部材	Tape	1			☞{MC:9.35}
D	32	346N1146A	スペーサ	Spacer	1			☞{MC:9.35}
E	33	356N9596	ブラケット	Bracket	1			☞{MC:9.48}
E	34	356N9597	ブラケット	Bracket	1			☞{MC:9.48}
E	35	386N1172	緩衝機材	Shock Absorber	2			☞{MC:9.48}

07D 消去搬送部 4
ERASURE CONVEYOR 4



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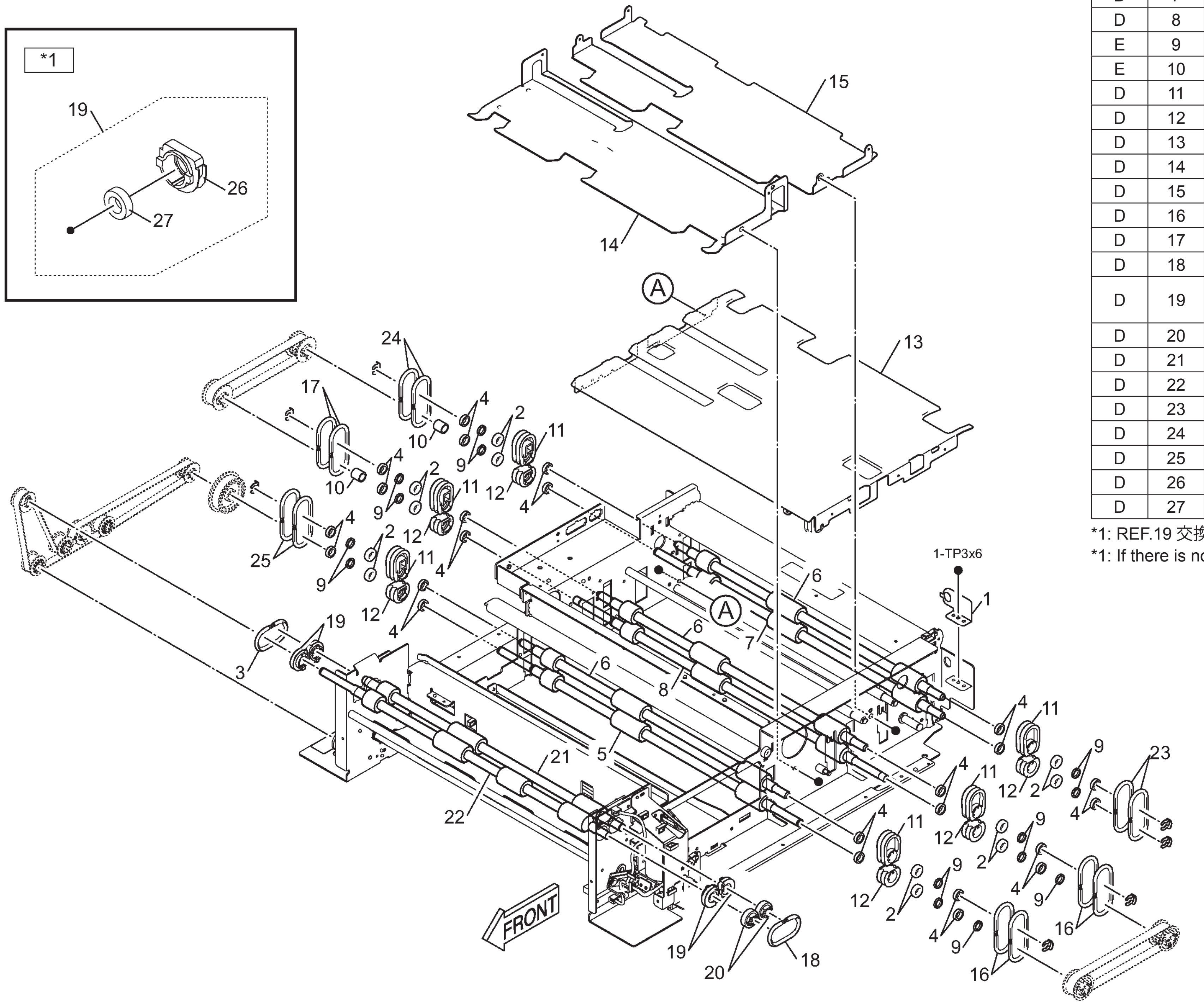
消去搬送部 4
ERASURE CONVEYOR 4 07D

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	346N1210	補助板	Plate Support	1			–
D	2	322SF229	ころがり軸受	Ball Bearing	12			☞{MC:9.40}
D	3	388N2549	引張りコイルバネ	Extension Spring	1	L ≒ 71mm		☞{MC:9.41}
D	4	322SP205	ころがり軸受	Ball Bearing	24			☞{MC:9.40}
D	5	334N3589A	ゴムローラ	Rubber Roller	1			☞{MC:9.40}
D	6	334N3591B	ゴムローラ	Rubber Roller	3			☞{MC:9.40}
D	7	334N3597A	ゴムローラ	Rubber Roller	1			☞{MC:9.40}
D	8	334N3608A	ゴムローラ	Rubber Roller	1			☞{MC:9.40}
E	9	347N1624A	スペーサ	Spacer	14			☞{MC:9.40}
E	10	347N1846	スペーサ	Spacer	2			☞{MC:9.27}
D	11	360N0484A	ハウジング	Housing	6			☞{MC:9.40}
D	12	360N0485A	ハウジング	Housing	6			☞{MC:9.40}
D	13	363Y0466C	ガイド	Guide	1			☞{MC:9.46}
D	14	363Y0483C	ガイド板	Guide Plate	1			☞{MC:9.43}
D	15	363Y0484A	ガイド板	Guide Plate	1			☞{MC:9.44}
D	16	388N2531A	引張りコイルバネ	Extension Spring	4	L ≒ 78mm		☞{MC:9.40}
D	17	388N2532A	引張りコイルバネ	Extension Spring	2	L ≒ 50mm		☞{MC:9.40}
D	18	388N100164A	引張りコイルバネ	Extension Spring	1	L ≒ 100mm		☞{MC:9.41}
D	19	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*1	#20001or later	☞{MC:9.41}
D	20	327N1121608A	平歯車	Spur Gear	2			☞{MC:9.41}
D	21	334N3577A	ゴムローラ	Rubber Roller	1			☞{MC:9.41}
D	22	334N3606	ゴムローラ	Rubber Roller	1			☞{MC:9.41}
D	23	388N2551	引張りコイルバネ	Extension Spring	2	L ≒ 66mm		☞{MC:9.40}
D	24	388N2552	引張りコイルバネ	Extension Spring	2	L ≒ 62mm		☞{MC:9.40}
D	25	388N2552	引張りコイルバネ	Extension Spring	2	L ≒ 62mm		☞{MC:9.51}
D	26	360N0475A	ハウジング	Housing	4			☞{MC:9.41}
D	27	322SB052	ころがり軸受	Ball Bearing	4			☞{MC:9.41}

*1: REF.19 交換時、部品在庫が無い場合は、REF.26 と REF.27 を手配すること。

*1: If there is no REF.19 in stock for replacement , use REF.26 and REF.27.



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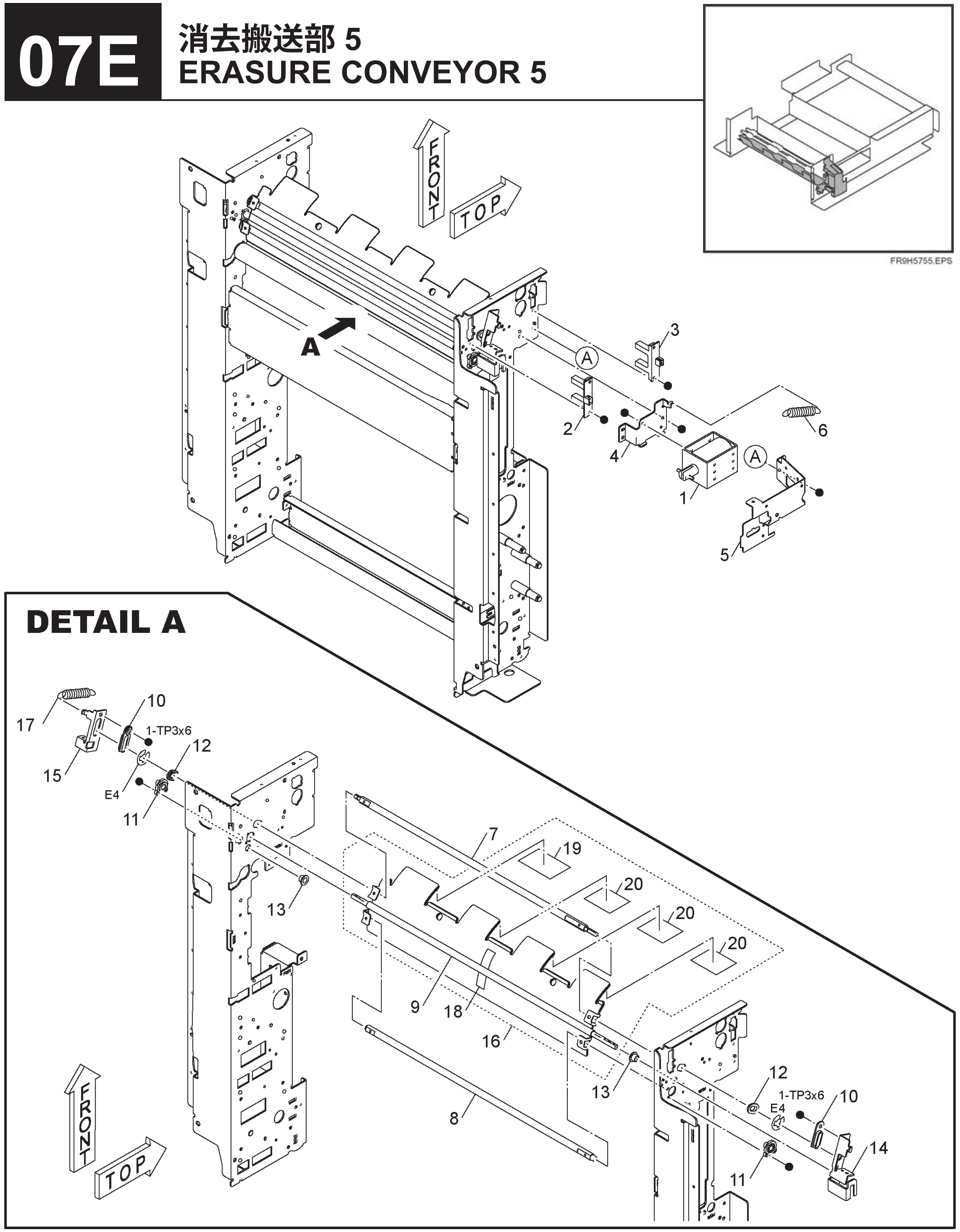
07E 消去搬送部 5
ERASURE CONVEYOR 5



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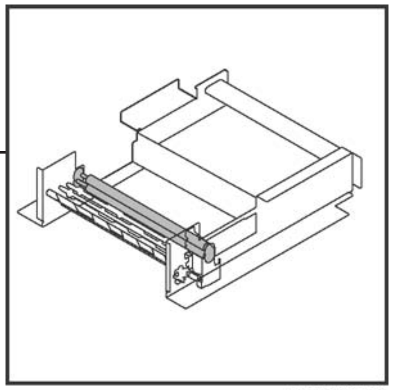
消去搬送部 5
ERASURE CONVEYOR 5 07E

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	107Y0169A/B	ソレノイド	Solenoid	1	SOLE1		☞{MC:9.23}
D	2.1	113Y1466	ボードアセンブリ	Board Assembly	1	SE1		☞{MC:9.17}
D	2.2	146N0016B	フォトインタラプタ	Photo Sensor	1	SE1		☞{MC:9.17}
D	3.1	113Y1466	ボードアセンブリ	Board Assembly	1	SE2		☞{MC:9.18}
D	3.2	146N0016B	フォトインタラプタ	Photo Sensor	1	SE2		☞{MC:9.18}
E	4	356N9204B	ブラケット	Bracket	1			☞{MC:9.23}
E	5	356N9205B	ブラケット	Bracket	1			☞{MC:9.23}
D	6	388N2540	引張りコイルバネ	Extension Spring	1	L ≒ 32mm		☞{MC:9.23}
E	7	319N4023A	軸	Shaft	1			☞{MC:9.47}
E	8	319N4024A	軸	Shaft	1			☞{MC:9.47}
E	9	319N4025A	軸	Shaft	1			☞{MC:9.47}
D	10	322N2003A	すべり軸受	Plain Bearing	2			☞{MC:9.47}
D	11	322N2006B	すべり軸受	Plain Bearing	2			☞{MC:9.47}
D	12	322N2007	軸受	Bearing	2			☞{MC:9.47}
D	13	322SY054	すべり軸受	Plain Bearing	2			☞{MC:9.47}
E	14	341N1090C/D	アーム	Arm	1			☞{MC:9.49}
E	15	341N1091A/B	アーム	Arm	1			☞{MC:9.50}
D	16	363Y100151	ガイド	Guide	1			☞{MC:9.47}
D	17	388N2540	引張りコイルバネ	Extension Spring	1	L ≒ 32mm		☞{MC:9.47}
D	18	386N1170	緩衝機材	Shock Absorber	1			☞{MC:9.47}
D	19	384N100013	こすり部材	Slide Tape	1			ー
D	20	384N100012	こすり部材	Slide Tape	3			ー

07F 消去搬送部 6
ERASURE CONVEYOR 6



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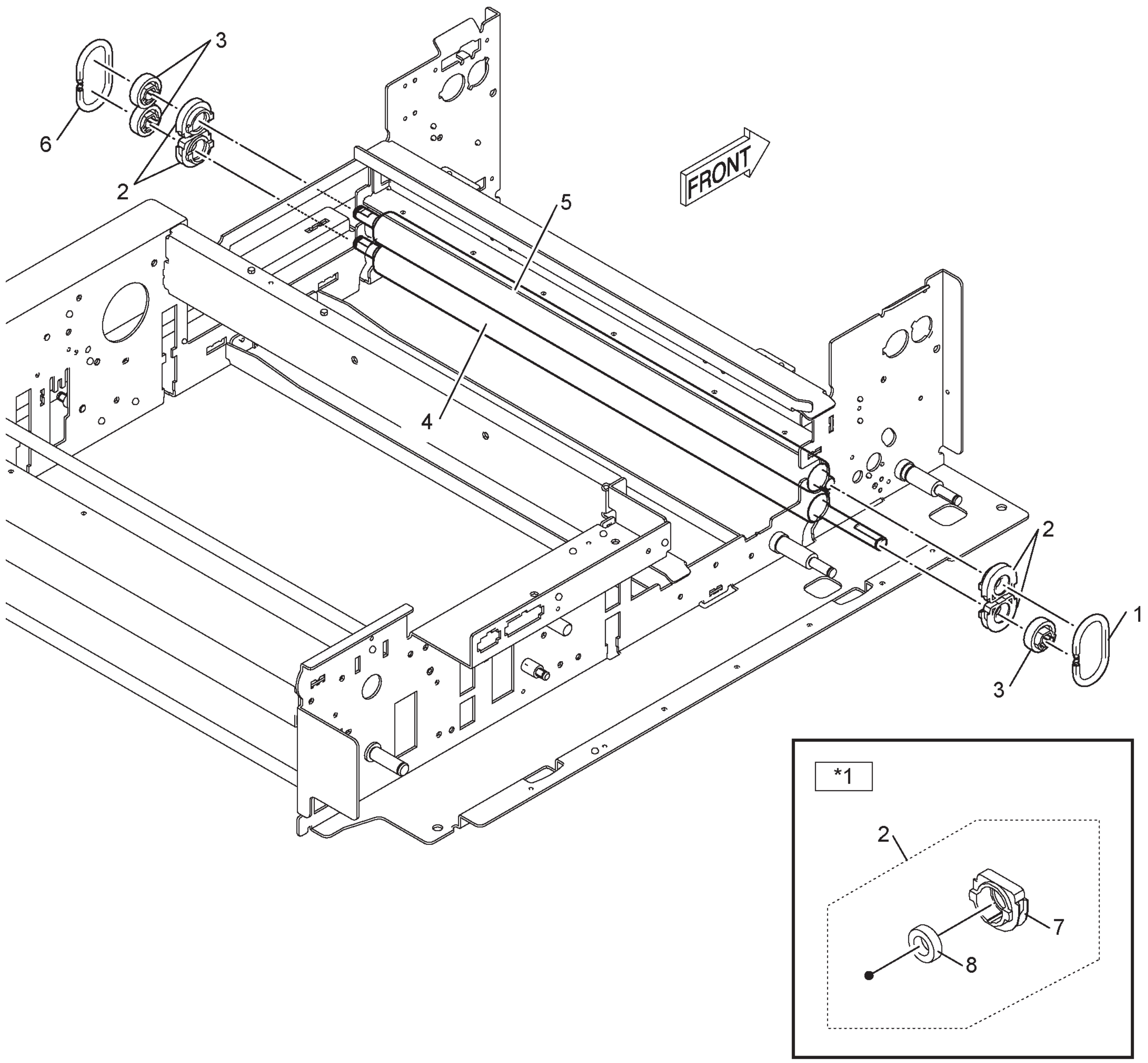

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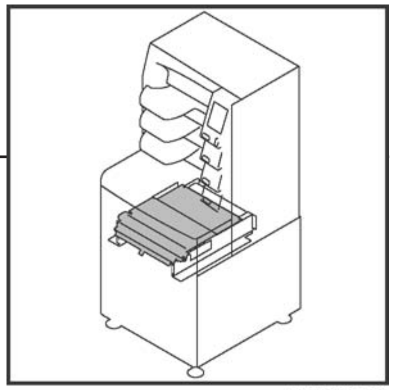
消去搬送部 6
ERASURE CONVEYOR 6
07F

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	388N2458A	引張りコイルバネ	Extension Spring	1	L ≒ 62mm		☞{MC:9.42}
D	2	321Y100002	ころがり軸受アセンブリ	Ball Bearing Assembly	4	*1	#20001or later	☞{MC:9.42}
D	3	327N1121608A	平歯車	Spur Gear	3			☞{MC:9.42}
D	4	334N3595A	ゴムローラ	Rubber Roller	1			☞{MC:9.42}
D	5	334N3596A	ゴムローラ	Rubber Roller	1			☞{MC:9.42}
D	6	388N2524A	引張りコイルバネ	Extension Spring	1	L ≒ 80mm		☞{MC:9.42}
D	7	360N0475A	ハウジング	Housing	4			☞{MC:9.42}
D	8	322SB052	ころがり軸受	Ball Bearing	4			☞{MC:9.42}

*1: REF.2 交換時、部品在庫が無い場合は、REF.7 と REF.8 を手配すること。

*1: If there is no REF.2 in stock for replacement , use REF.7 and REF.8.

07G 消去搬送部 7
ERASURE CONVEYOR 7



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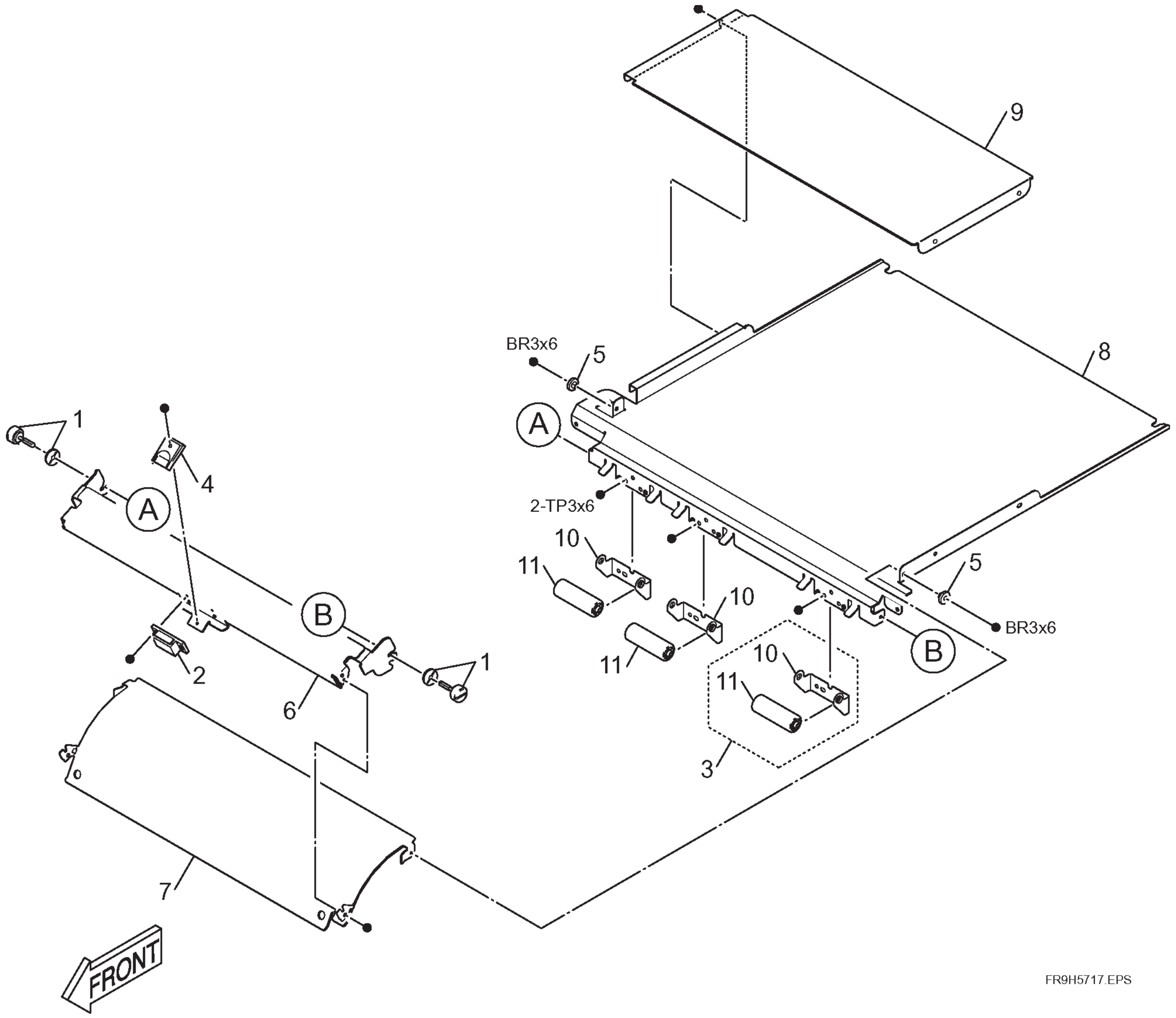
消去搬送部 7
ERASURE CONVEYOR 7 07G

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	308S0012	特殊ネジ	Screw	2			☞{MC:9.16}
D	2	316S3012A	キャッチ	Catch	1			☞{MC:9.16}
D	3	334Y2244A	樹脂ローラアセンブリ	Resin Roller Assembly	3			☞{MC:9.16}
D	4	340D816796	ノブ	Knob	1		#20001 or later	☞{MC:9.16}
E	5	347N1730A	スペーサ	Spacer	2			☞{MC:9.16}
E	6	356N9293B	ブラケット	Bracket	1			☞{MC:9.16}
D	7	363N2493A/B/C	ガイド	Guide	1			☞{MC:9.16}
D	8	363Y0434A	ガイド	Guide	1			☞{MC:9.16}
D	9	363Y0457	ガイド	Guide	1			☞{MC:9.16}
D	10	388N5269	板バネ	Leaf Spring	3			☞{MC:9.16}
D	11	334N3580B	樹脂ローラ	Resin Roller	3			☞{MC:9.16}



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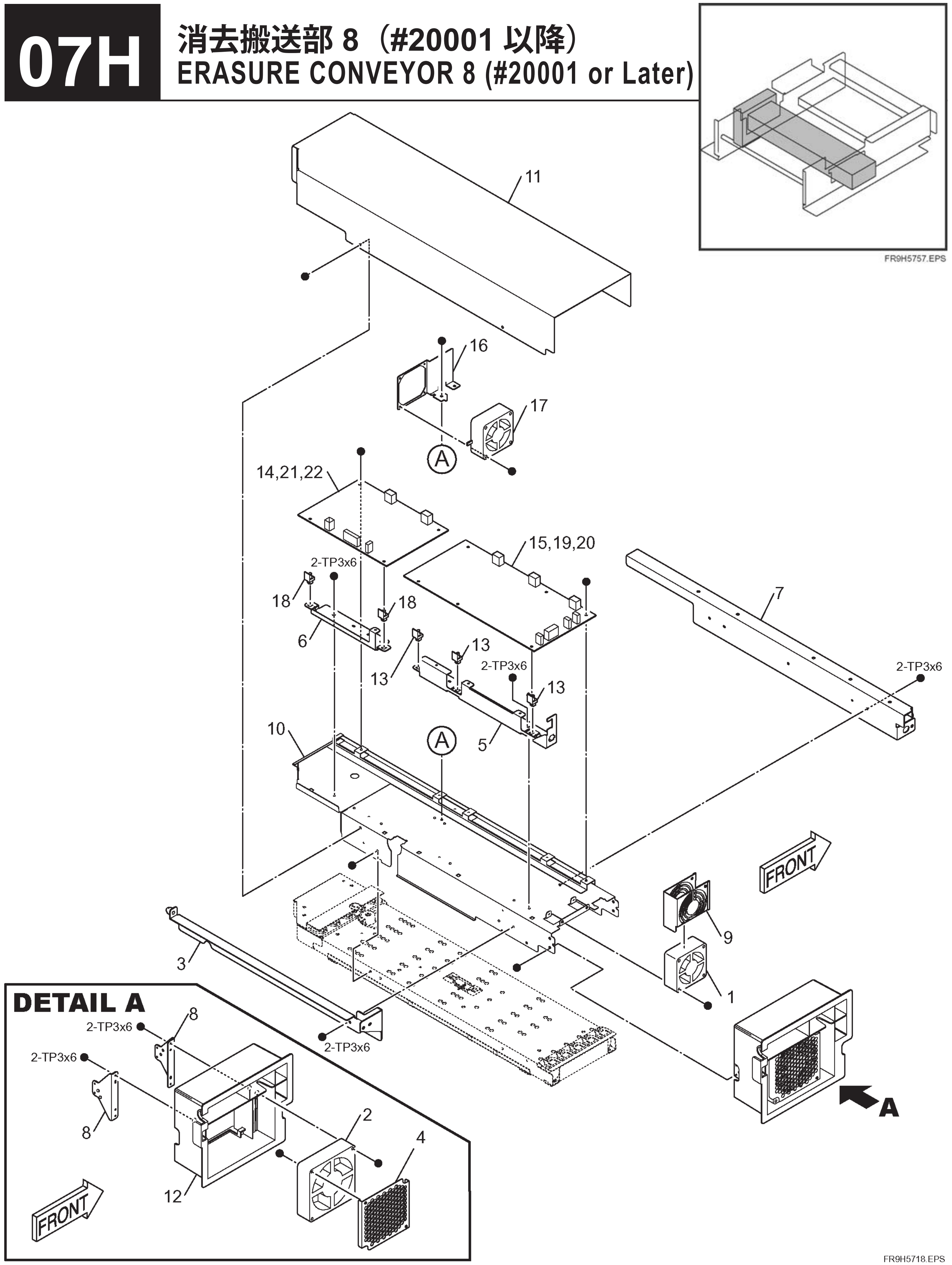
07H 消去搬送部 8（#20001 以降）
ERASURE CONVEYOR 8 (#20001 or Later)

07H 消去搬送部 8（#20001 以降）
ERASURE CONVEYOR 8(#20001 or Later)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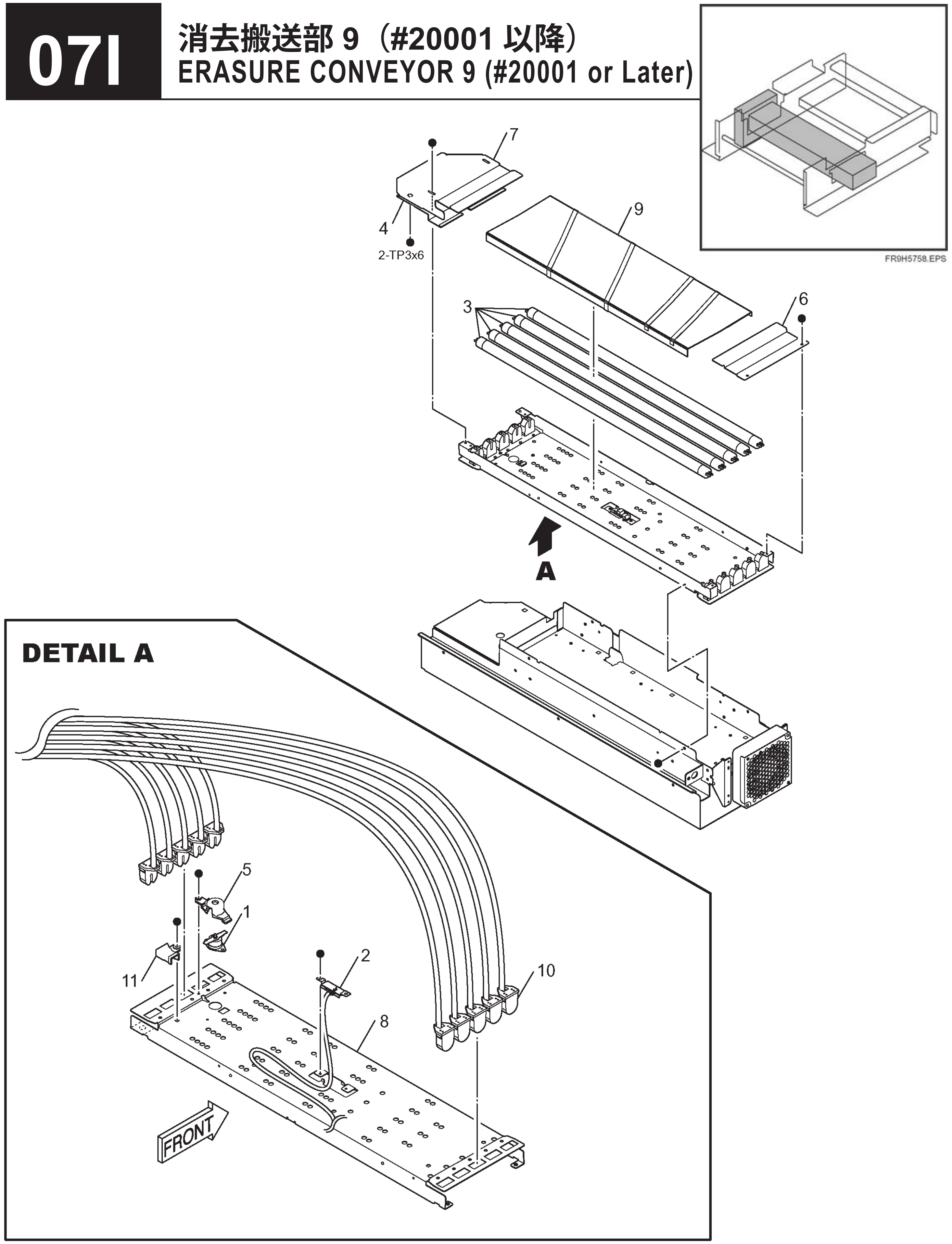
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	119S0006/A/B	電動ファン	Fan	1	FANE2		☞{MC:9.6}
D	2	119S0008/A/B	電動ファン	Fan	1	FANE1		☞{MC:9.5}
E	3	356N9112B	ブラケット	Bracket	1			☞{MC:9.2}
E	4	356N9172	ブラケット	Bracket	1			☞{MC:9.5}
E	5	356N9173C	ブラケット	Bracket	1			☞{MC:9.14}
E	6	356N9174A	ブラケット	Bracket	1			☞{MC:9.15}
E	7	356N9244C	ブラケット	Bracket	1			☞{MC:9.2}
E	8	356N9245B/C	ブラケット	Bracket	2			☞{MC:9.4}
E	9	364N0103B/C	ガード	Guard	1			☞{MC:9.6}
E	10	369N0263C	ダクト	Duct	1			☞{MC:9.2}
E	11	369N0266B	ダクト	Duct	1			☞{MC:9.3}
E	12	369N0267D	ダクト	Duct	1			☞{MC:9.4}
E	13	316S0261	止め具	Clamp	3			☞{MC:9.14}
C	14	109N0021C/D	蛍光灯安定器	Lamp Stabilizer	1	INV17B		☞{MC:9.15}
C	15	109N0020C/D	蛍光灯安定器	Lamp Stabilizer	1	INV17A		☞{MC:9.14}
E	16	356N9250C	ブラケット	Bracket	1			☞{MC:9.7}
D	17	119S0006/A/B	電動ファン	Fan	1	FANE3		☞{MC:9.7}
E	18	316S0261	止め具	Clamp	2			☞{MC:9.15}
AT	19	137S1178	ヒューズ	FUSE	1	48V/1.0A For INV17A		☞{MC:14.7}
AT	20.1	137S1175	ヒューズ	FUSE	3	48V/0.5A For INV17A		☞{MC:14.7}
AT	20.2	137S1458	ヒューズ	FUSE	3	48V/0.5A For INV17A		☞{MC:14.7}
AT	21	137S1178	ヒューズ	FUSE	1	48V/1.0A For INV17B		☞{MC:14.8}
AT	22.1	137S1175	ヒューズ	FUSE	1	48V/0.5A For INV17B		☞{MC:14.8}
AT	22.2	137S1458	ヒューズ	FUSE	1	48V/0.5A For INV17B		☞{MC:14.8}

07I

消去搬送部 9（#20001 以降）
ERASURE CONVEYOR 9 (#20001 or Later)



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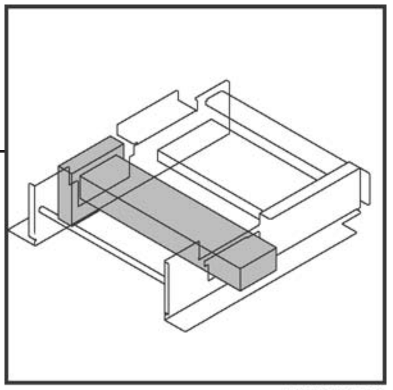
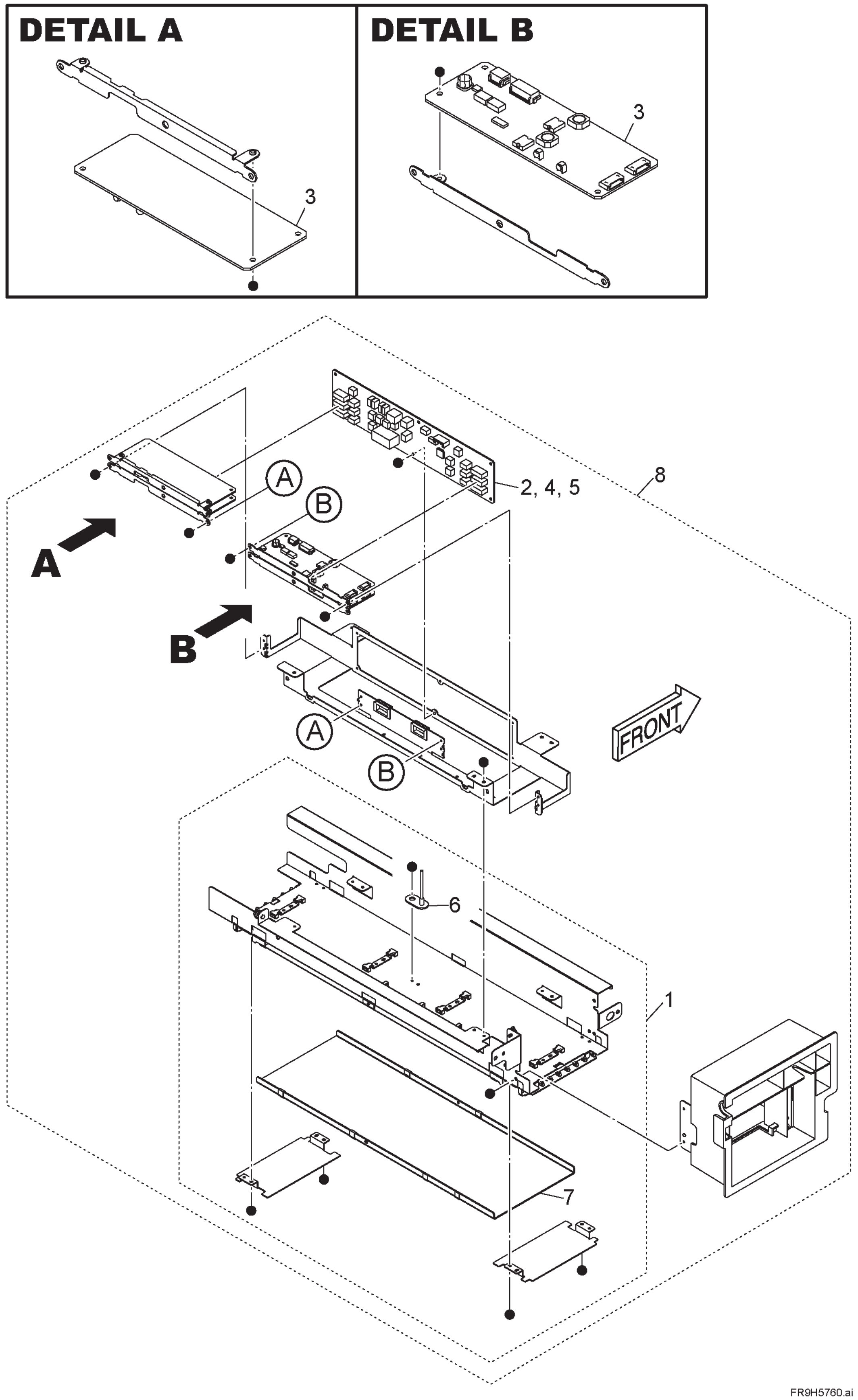
消去搬送部 9（#20001 以降）
ERASURE CONVEYOR 9 (#20001 or Later)
07I

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	115S0153/A	感熱スイッチ	Thermo Switch	1	TSWE1		☞{MC:9.12}
D	2	115Y0035B	サーミスタ	Thermo Switch	1	THE1		☞{MC:9.11}
C	3	123N0007D	蛍光灯	Lamp	5			☞{MC:9.9}
E	4	356N9113A	ブラケット	Bracket	1			☞{MC:9.8}
E	5	356N9246	ブラケット	Bracket	1			☞{MC:9.12}
D	6	407Y0028A	反射板	Reflective Plate	1			☞{MC:9.8}
D	7	407Y0029	反射板	Reflective Plate	1			☞{MC:9.8}
D	8	407Y0030/A	反射板	Reflective Plate	1			☞{MC:9.10}
A	9	603Y0066	フィルタ	Filter	1			☞{MC:9.8}
E	10	120Y0091A	ソケット	Socket	1			☞{MC:9.13}
E	11	356N9247	ブラケット	Bracket	1			☞{MC:9.13}

07J 消去搬送部 10（#50001 以降） ERASURE CONVEYOR 10 (#50001 or Later)

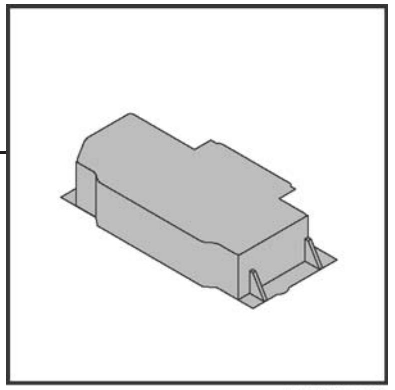




消去搬送部 10（#50001 以降）
ERASURE CONVEYOR 10 (#50001 or Later) 07J

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	840Y100201	ランプケース	Lamp Case	1			☞{MC:9.52}
C	2	113Y1756G	ボードアセンブリ（ERS23A）	Board Assembly (ERS23A)	1			☞{MC:9.54}
C	3	109N100001A	ボードアセンブリ（INV26A）	Board Assembly (INV26A)	4			☞{MC:9.53}
AT	4	137S1280	ヒューズ	FUSE	2	48V/5.0A For ERS23A		☞{MC:14.9}
AT	5	137S1277	ヒューズ	FUSE	2	48V/2.0A For ERS23A		☞{MC:14.9}
D	6	115Y0047B	サーミスタ	Thermo Switch	1	THE1		☞{MC:9.52}
D	7	603Y100030A	フィルタ	Filter	1			☞{MC:9.55}
D	8	840Y100199	消去ランプアセンブリ	Erasure Lamp Assembly	1			☞{MC:9.52}

08 光学部 SCANNING OPTICS UNIT



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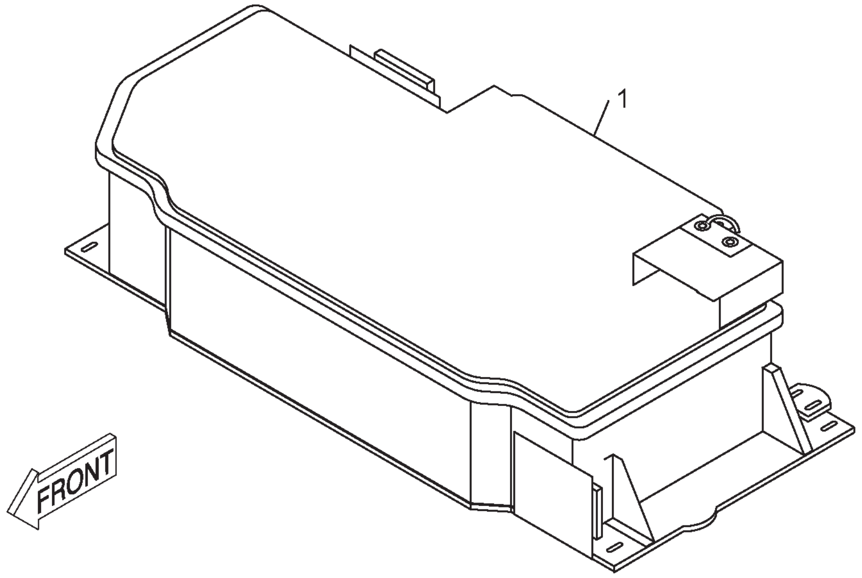
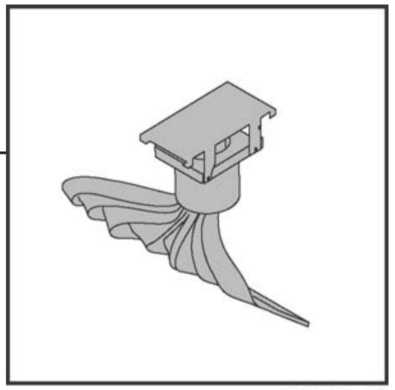
光学部 SCANNING OPTICS UNIT 08

RANK	REF.	PART NO.	PART NAME	QTY.	REMARKS	SERIAL NO.	REFER TO
DR	1	839Y0057F/G	光学部 Scanning Optics Unit	1			☞{MC:10.}



1
FRONT
FR9H5801.EPS

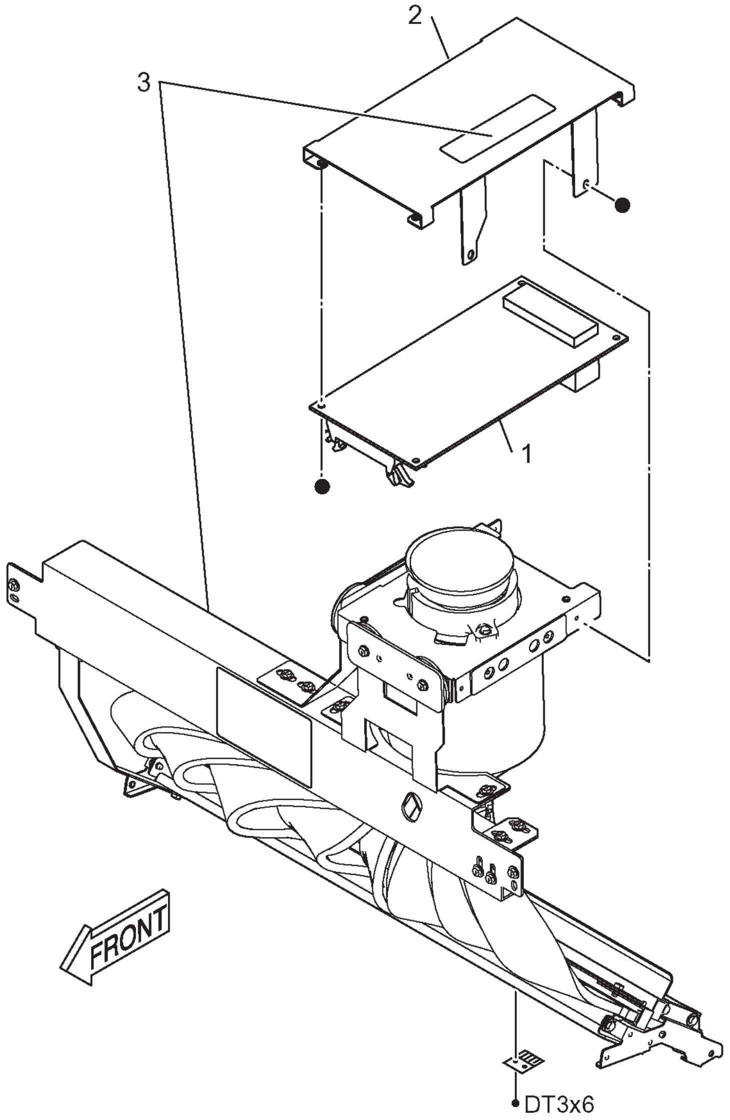
09 集光部
LIGHT-COLLECTING UNIT



FR9H5951.EPS

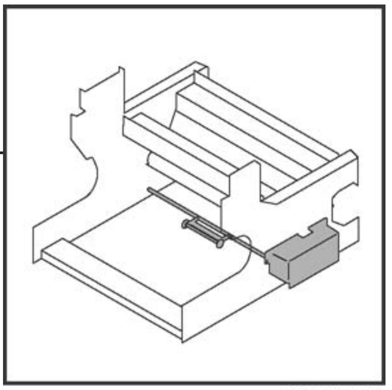
集光部
LIGHT-COLLECTING UNIT 09

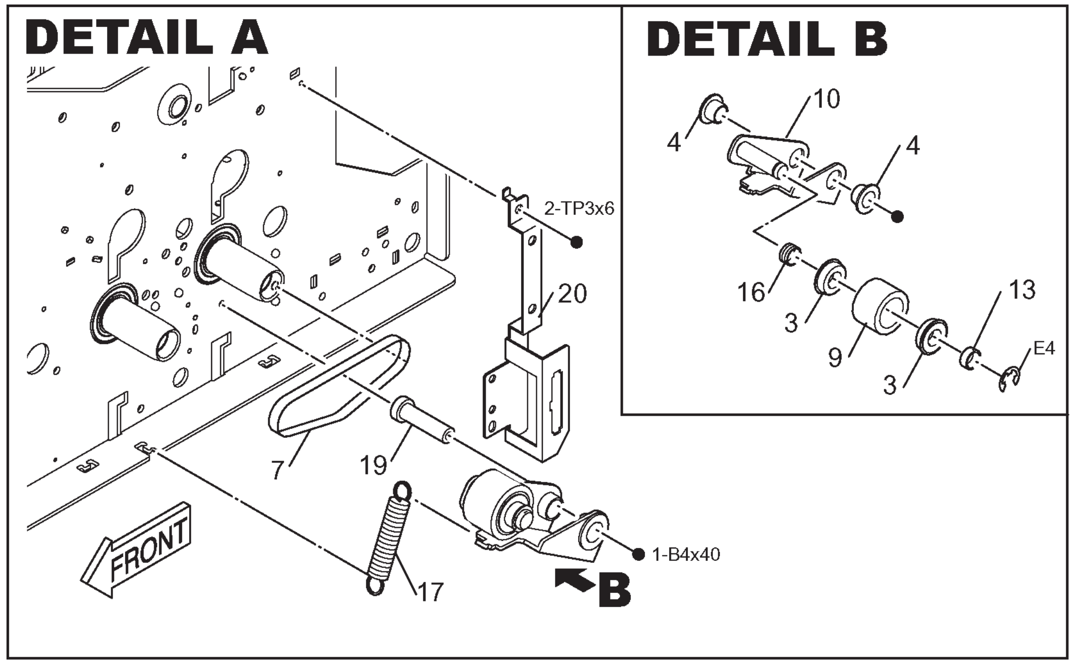
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
DR	1.1	113Y1694D/E	PMT17A	PMT17A	1			☞{MC:11.3}
DR	1.2	113Y1737G	PMT23A	PMT23A	1			☞{MC:11.3}
D	2	345N1664B	シールド材	Shielding Tape	1			☞{MC:11.3}
D	3	606Y0077A	集光ガイド	Light-collecting Guide	1			☞{MC:11.1}



FR9H5916.EPS

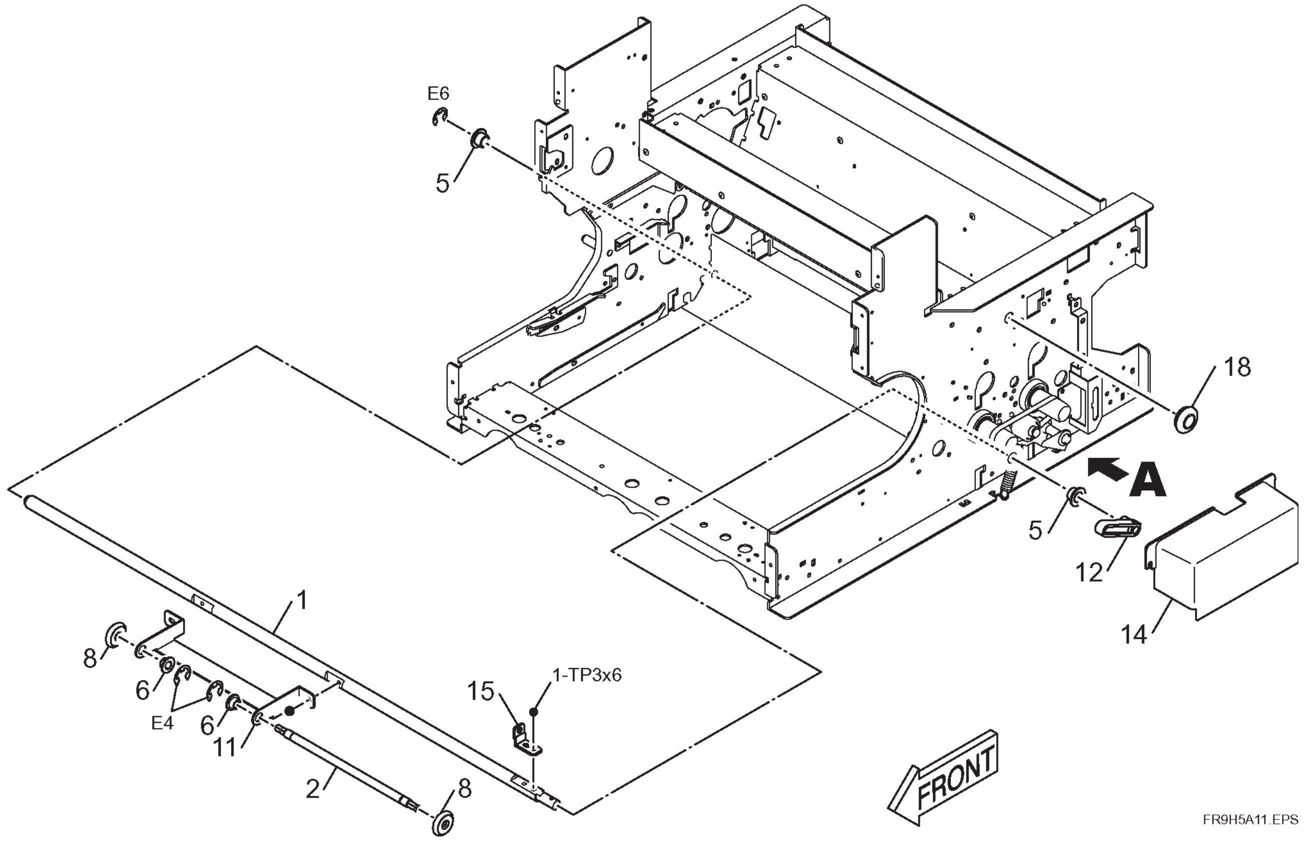
10A 副走査部 1
SUB SCANNING UNIT 1


FR9H5A51.EPS

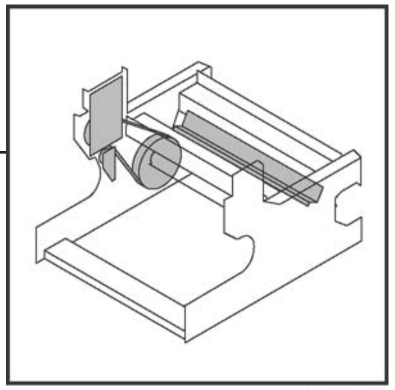

DETAIL A
2-TP3x6
20
7
19
17
1-B4x40
B
FRONT
DETAIL B
10
4
4
16
3
9
3
13
E4

副走査部 1
SUB SCANNING UNIT 1
10A

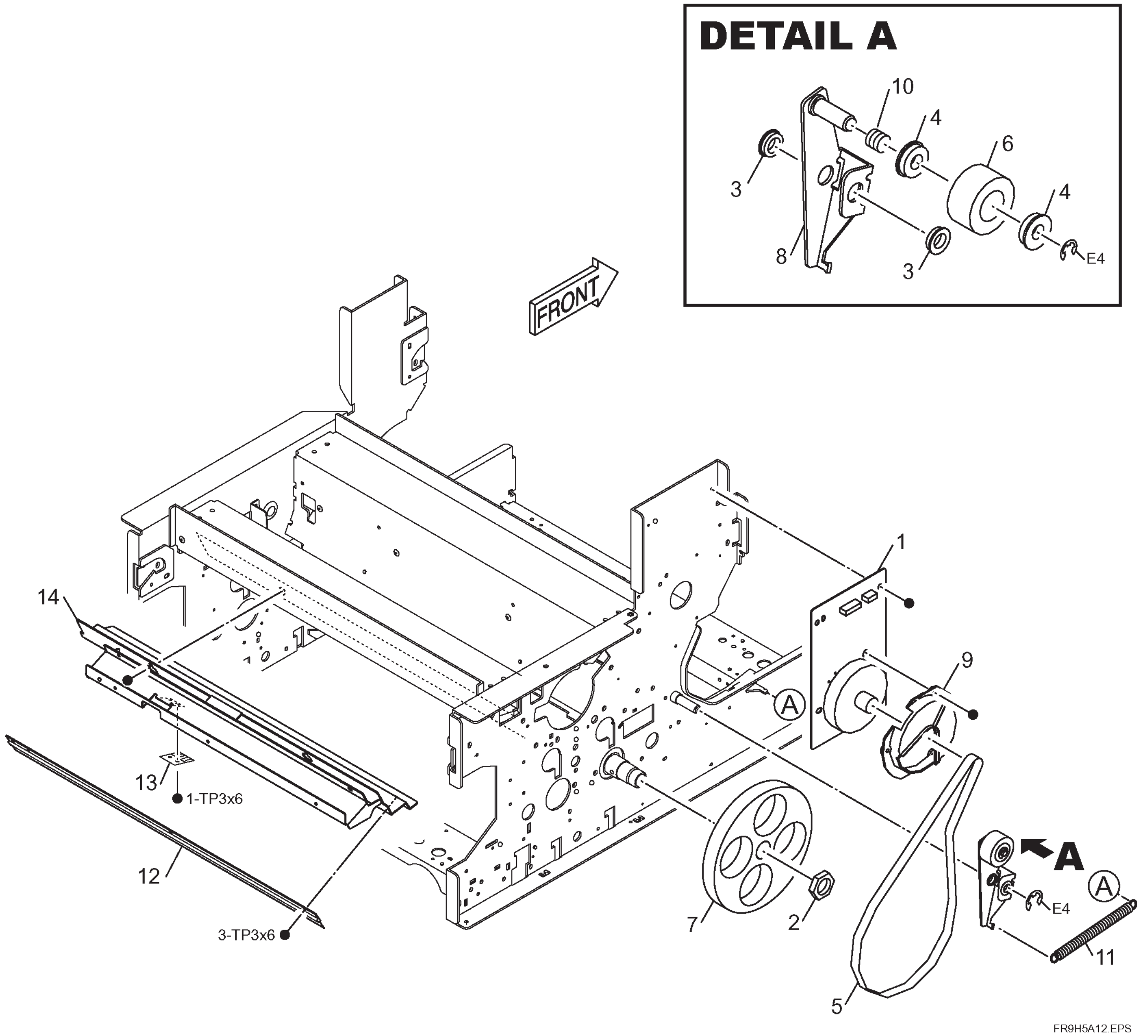
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	319N3967	軸	Shaft	1			☞{MC:12.33}
E	2	319N3972A	軸	Shaft	1			☞{MC:12.33}
D	3	322SF149	すべり軸受	Plain Bearing	2			☞{MC:12.6}
D	4	322SY055	すべり軸受	Plain Bearing	2			☞{MC:12.6}
D	5	322SY055	すべり軸受	Plain Bearing	2			☞{MC:12.33}
D	6	322SY116	すべり軸受	Plain Bearing	2			☞{MC:12.33}
E	7	323N1221A	ベルト	Belt	1			☞{MC:12.4}
D	8	334F2932A	樹脂ローラ	Resin Roller	2			☞{MC:12.33}
D	9	337N0043	ホイール	Flywheel	1			☞{MC:12.6}
E	10	341N1062A	アーム	Arm	1			☞{MC:12.6}
E	11	341N1063A	アーム	Arm	1			☞{MC:12.33}
E	12	342D738596A	レバー	Lever	1			☞{MC:12.33}
E	13	347N0636	スペーサ	Spacer	1			☞{MC:12.6}
E	14	350N2721B	カバー	Cover	1			☞{MC:12.2}
E	15	356N9199A	ブラケット	Bracket	1			☞{MC:12.33}
D	16	388N1073	圧縮コイルバネ	Compression Coil Spring	1	L ≒ 8mm		☞{MC:12.6}
D	17	388N2227A	引張りコイルバネ	Extension Spring	1	L ≒ 42mm		☞{MC:12.4}
D	18	318S3060	グロメット	Grommet	1			–
E	19	319N3966A	軸	Shaft	1			☞{MC:12.6}
E	20	356N9193B	ブラケット	Bracket	1			–


E6
5
18
A
5
12
14
1
8
6
E4
6
11
15
1-TP3x6
2
8
FRONT
FR9H5A11.EPS

10B 副走査部 2 SUB SCANNING UNIT 2



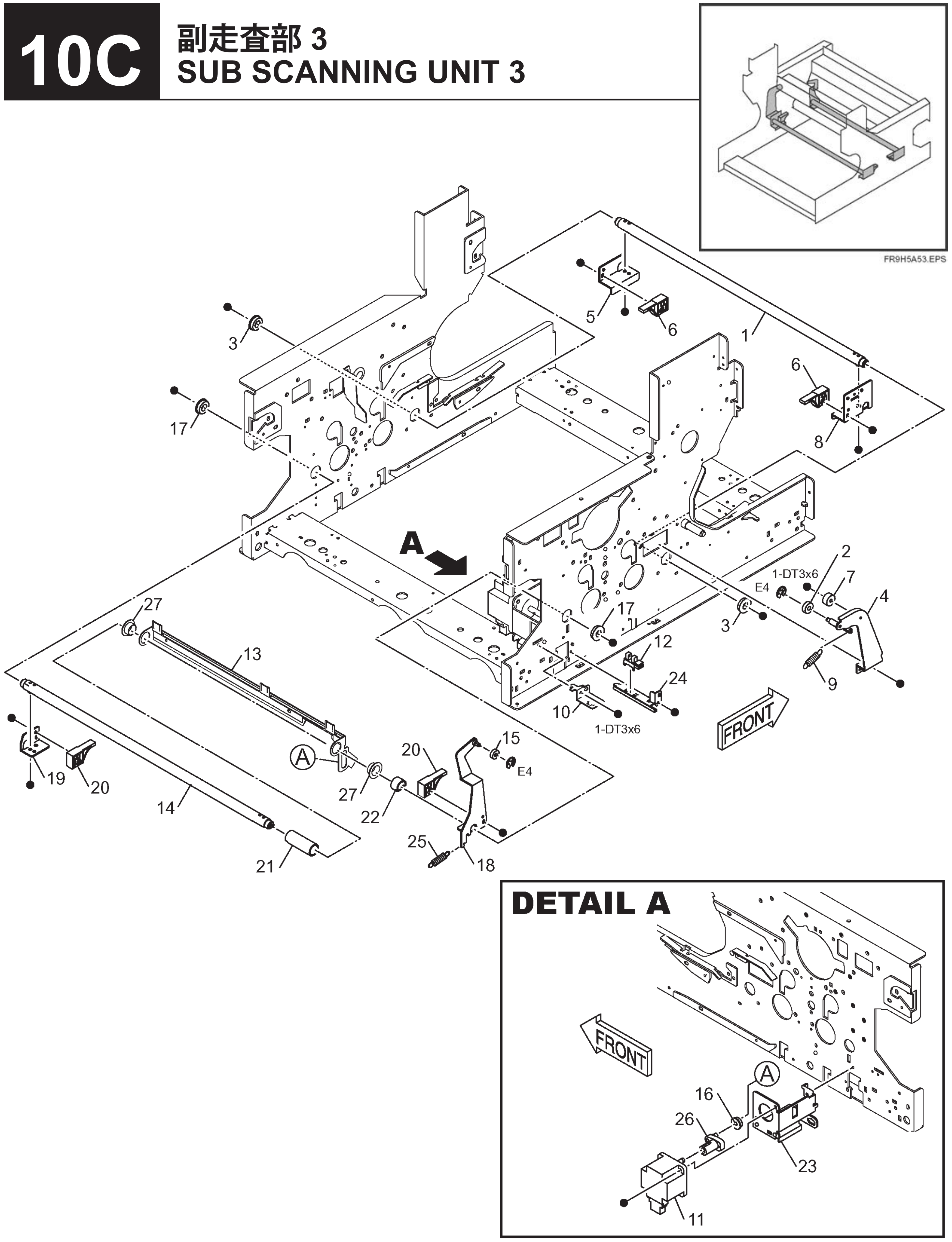
FR9H5A52.EPS



副走査部 2 SUB SCANNING UNIT 2 10B

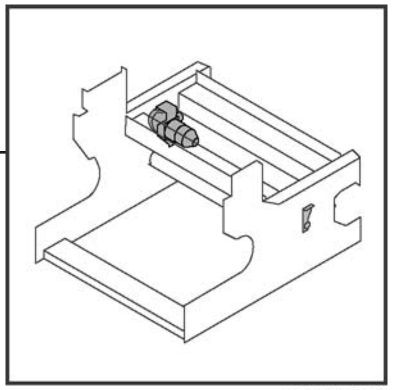
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	118YX251C	FFM モータ	FFM Motor	1	MZ1		☞{MC:12.9}
D	2	305N0070	ナット	Nut	1			☞{MC:12.8}
D	3	322SY055	すべり軸受	Plain Bearing	2			☞{MC:12.7}
D	4	322SF149	すべり軸受	Plain Bearing	2			☞{MC:12.7}
E	5	323N0041	ベルト	Belt	1			☞{MC:12.5}
D	6	337N0044	ホイール	Flywheel	1			☞{MC:12.7}
D	7	337N0059C	ホイール	Flywheel	1			☞{MC:12.8}
E	8	341N1056B	アーム	Arm	1			☞{MC:12.7}
E	9	350N2533B	カバー	Cover	1			☞{MC:12.9}
D	10	388N1073	圧縮コイルバネ	Compression Coil Spring	1	L ≒ 8mm		☞{MC:12.7}
D	11	388N2434A	引張りコイルバネ	Extension Spring	1	L ≒ 76mm		☞{MC:12.5}
D	12	387N0120C/D	帯電防止材	Antistatic Brush	1			☞{MC:12.10}
D	13	387N0138C	帯電防止材	Antistatic Brush	1			–
E	14	356N6813C	ブラケット	Bracket	1			☞{MC:12.10}

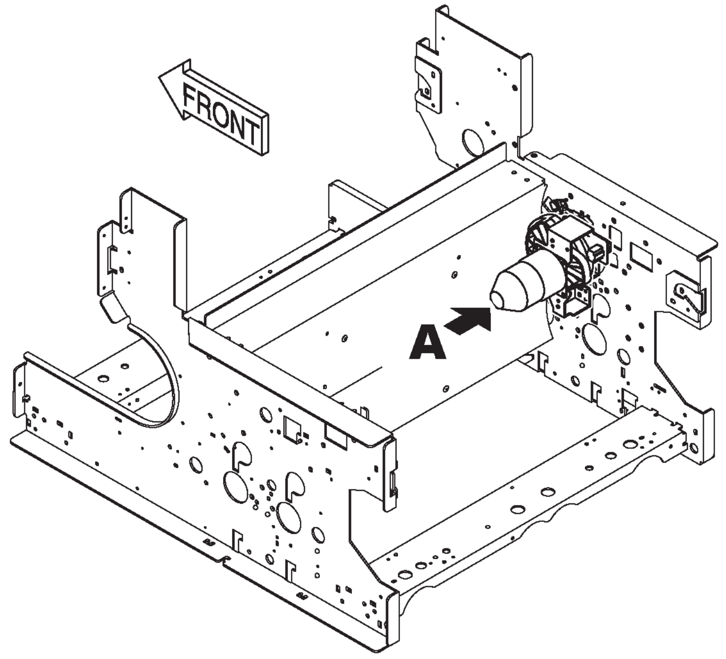
10C 副走査部 3
SUB SCANNING UNIT 3



RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	319N3600B	軸	Shaft	1			☞{MC:12.16}
D	2	322SF154	軸受	Bearing	1			☞{MC:12.16}
D	3	322SF149	すべり軸受	Plain Bearing	2			☞{MC:12.16}
E	4	341N0934C	アーム	Arm	1			☞{MC:12.16}
E	5	341N0941B	アーム	Arm	1			☞{MC:12.16}
E	6	344N0002B	フォーク	Fork	2			☞{MC:12.16}
E	7	347N1700B	スペーサ	Spacer	1			☞{MC:12.16}
E	8	356N6836B	ブラケット	Bracket	1			☞{MC:12.16}
D	9	388N2477	引張りコイルバネ	Extension Spring	1	L ≒ 22mm		☞{MC:12.16}
E	10	356N9194	ブラケット	Bracket	1			–
D	11	118SX161/A	パルスモータ	Stepping Motor	1	MZ4		☞{MC:12.15}
D	12	146S0029/A	ホトインタラプタ	Photo Sensor	1	SZ5		☞{MC:12.12}
E	13	316N0465B	アーム	Arm	1			☞{MC:12.17}
E	14	319N3600B	軸	Shaft	1			☞{MC:12.17}
D	15	322SF154	軸受	Bearing	1			☞{MC:12.17}
D	16	322SF210	軸受	Bearing	1			☞{MC:12.15}
E	17	322SF149	すべり軸受	Plain Bearing	2			☞{MC:12.17}
E	18	341N0935D	アーム	Arm	1			☞{MC:12.17}
E	19	341N0942B	アーム	Arm	1			☞{MC:12.17}
E	20	344N0002B	フォーク	Fork	2			☞{MC:12.17}
E	21	347N1844A	スペーサ	Spacer	1			☞{MC:12.17}
E	22	347N1845A	スペーサ	Spacer	1			☞{MC:12.17}
E	23	356N9099A	ブラケット	Bracket	1			☞{MC:12.15}
E	24	356N9183C	ブラケット	Bracket	1			☞{MC:12.12}
D	25	388N2477	引張りコイルバネ	Extension Spring	1	L ≒ 22mm		☞{MC:12.17}
E	26	341N1057C	アーム	Arm	1			☞{MC:12.15}
D	27	322SY060	すべり軸受	Plain Bearing	2			☞{MC:12.17}

10D 副走査部 4
SUB SCANNING UNIT 4

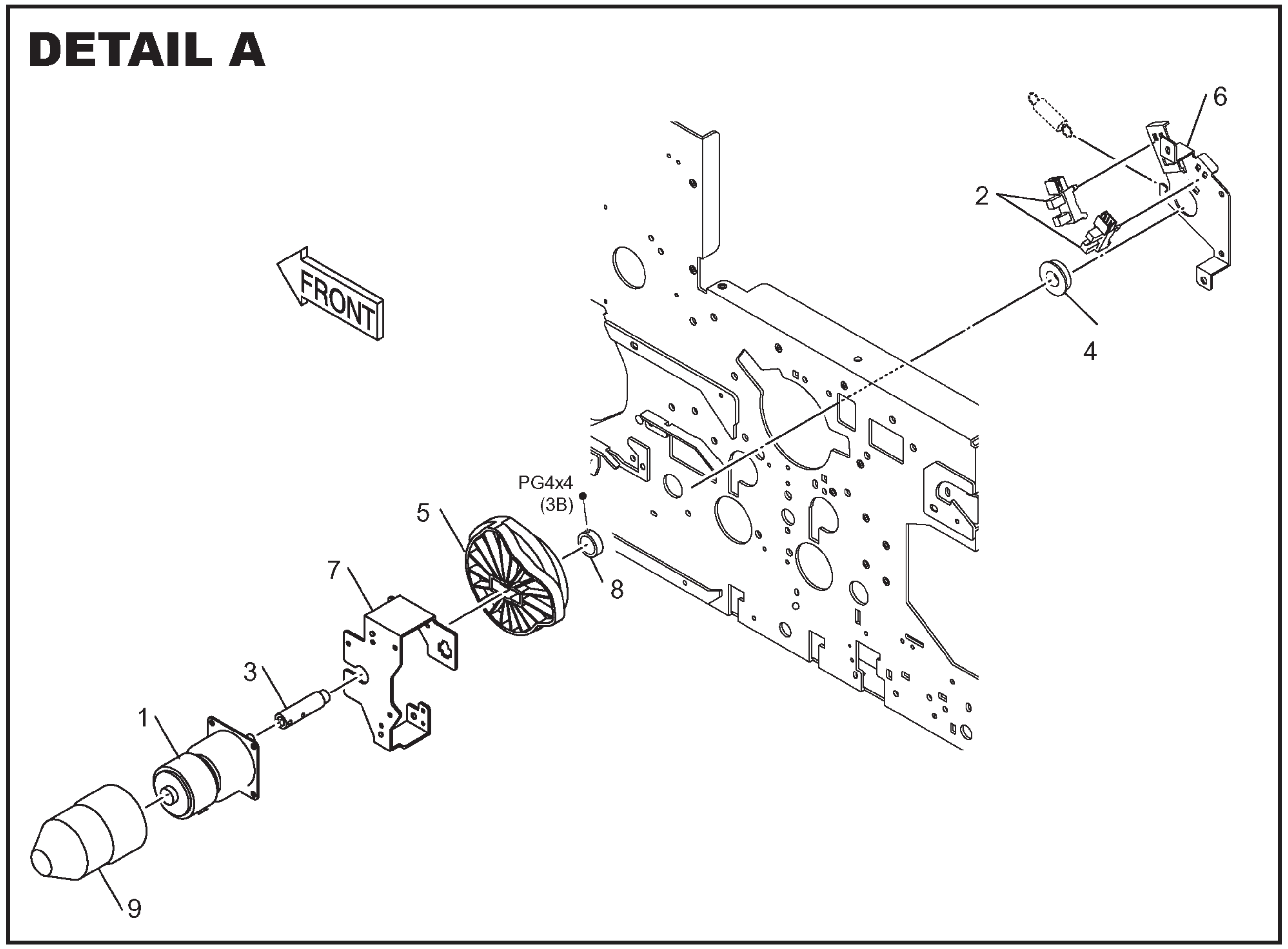

FR9H5A54.EPS



副走査部 4
SUB SCANNING UNIT 4 10D

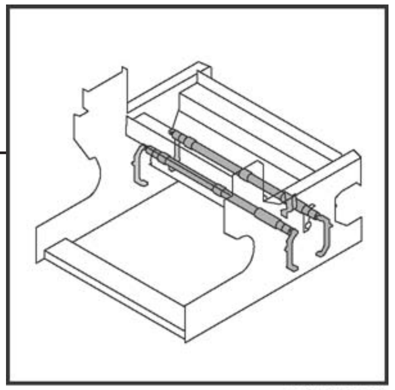
RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	118YX216C/B/D	モータ	Motor	1	MZ2		☞{MC:12.13}
D	2	146S0029/A	ホトインタラプタ	Photo Sensor	2	SZ2,SZ3		☞{MC:12.11}
E	3	319N3616B	軸	Shaft	1			☞{MC:12.13}
D	4	322SF149	すべり軸受	Plain Bearing	1			☞{MC:12.11}
D	5	329N0166	カム	Cam	1			☞{MC:12.13}
E	6	356N6819C	ブラケット	Bracket	1			☞{MC:12.11}
E	7	356N6820E	ブラケット	Bracket	1			☞{MC:12.13}
D	8	338N0520B	リングカラー	Ring Collar	1			☞{MC:12.13}
E	9	350N2534	カバー	Cover	1			☞{MC:12.13}

＊参考：（3B）はゆるみ止め接着剤を使用する箇所である。
＊ REMARKS：（3B）indicates to use screw locking adhesive.

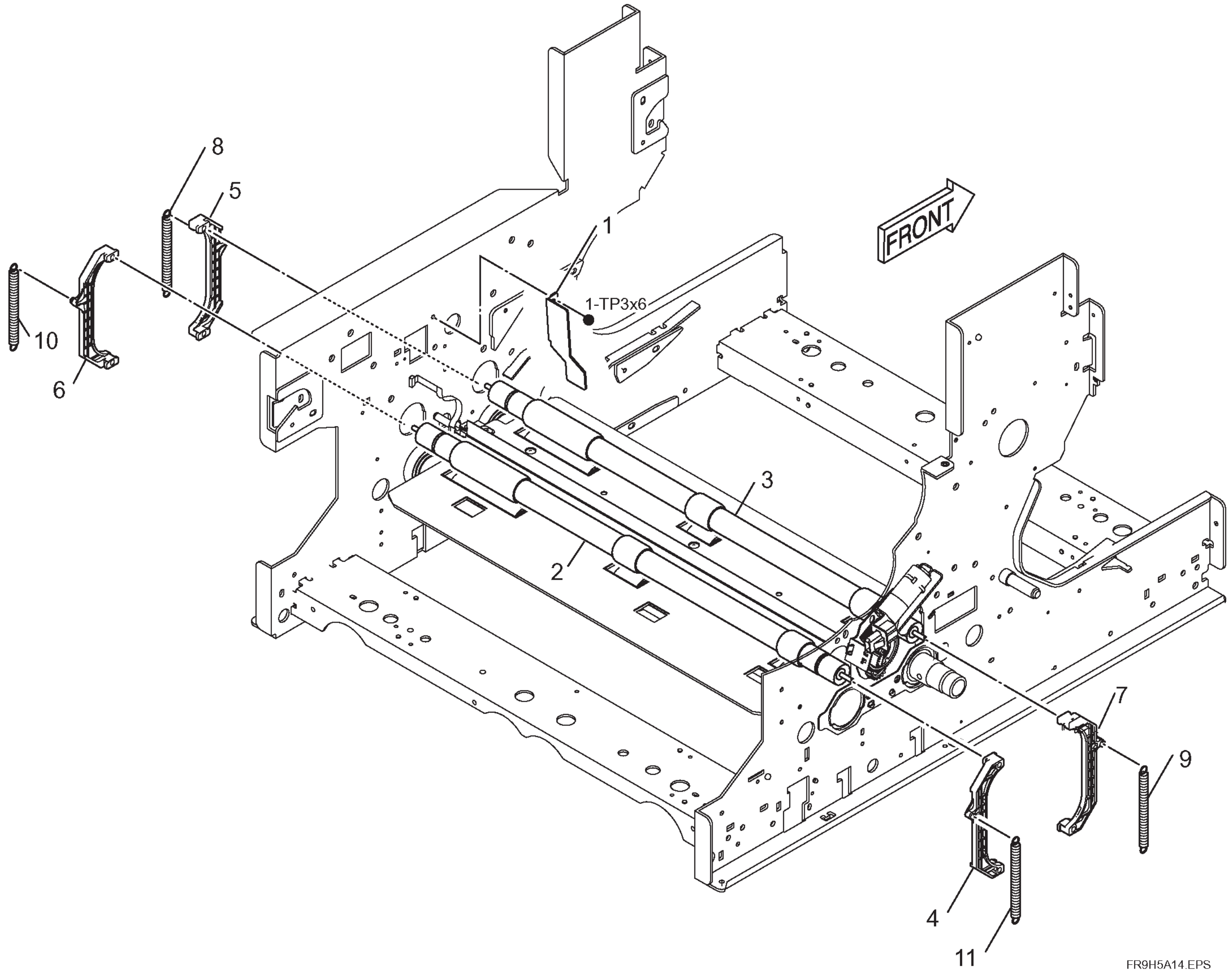


FR9H5A18.EPS

10E 副走査部 5 SUB SCANNING UNIT 5



FR9H5A55.EPS

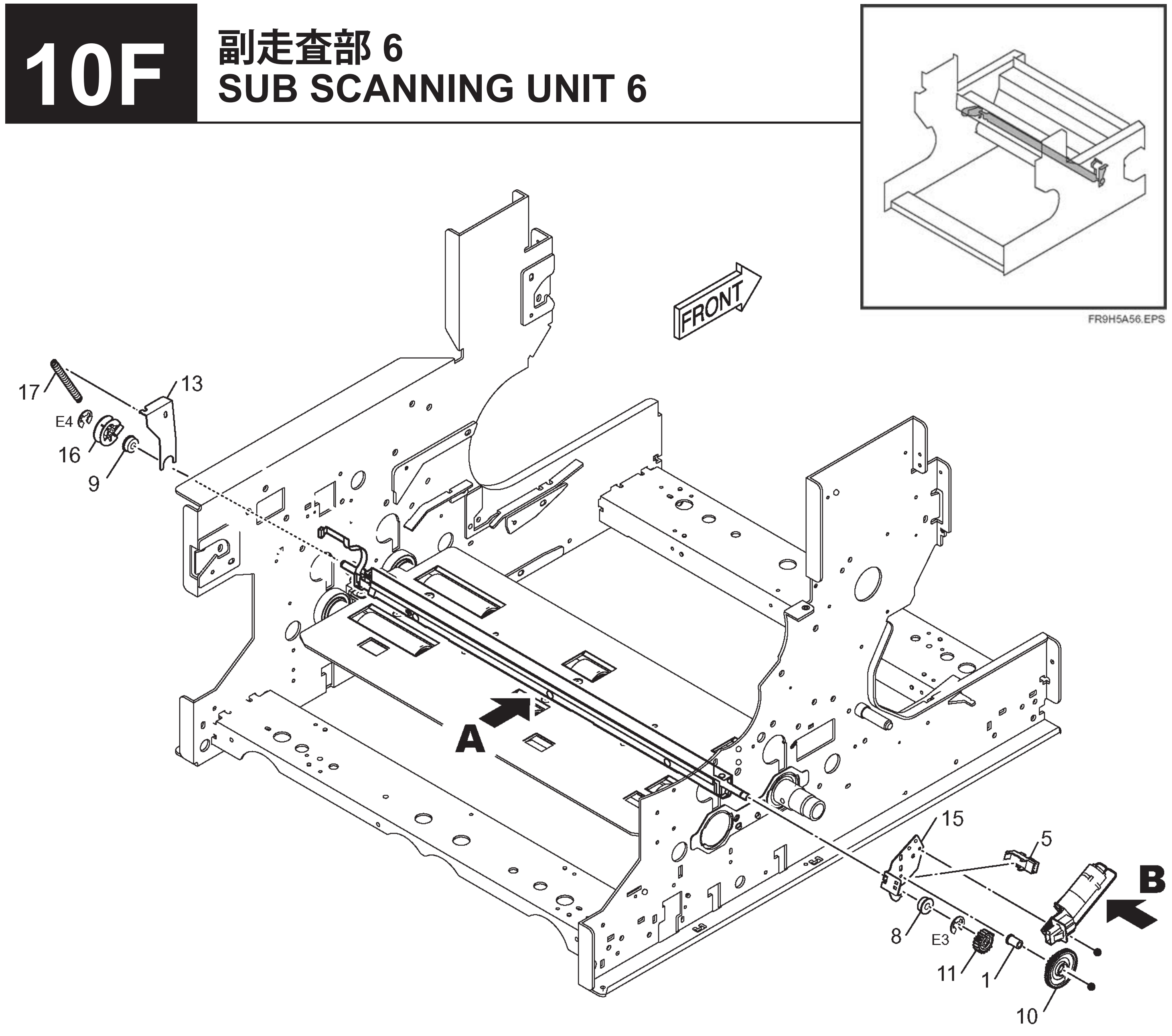


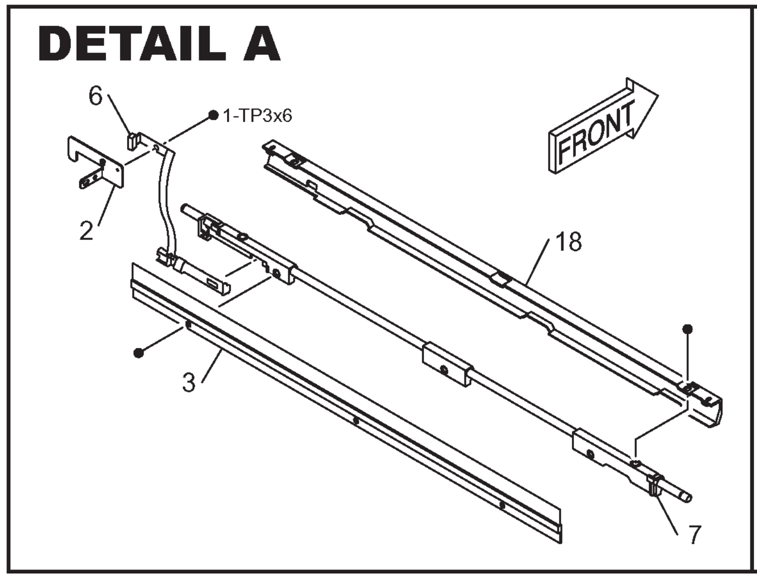
FR9H5A14.EPS

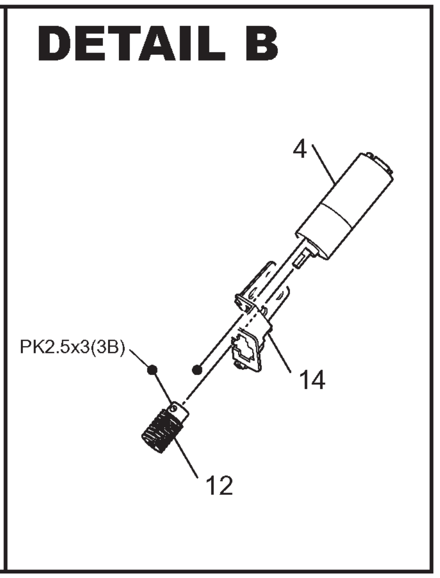
副走査部 5
SUB SCANNING UNIT 5
10E

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	356N9181C	ブラケット	Bracket	1			☞{MC:12.23}
D	2	334Y3217	ゴムローラ	Rubber Roller	1			☞{MC:12.20}
D	3	334Y3217	ゴムローラ	Rubber Roller	1			☞{MC:12.21}
D	4	343N0055B	フック	Hook	1			☞{MC:12.20}
D	5	343N0055B	フック	Hook	1			☞{MC:12.21}
D	6	343N0056B	フック	Hook	1			☞{MC:12.20}
D	7	343N0056B	フック	Hook	1			☞{MC:12.21}
D	8	388N2526	引張りコイルバネ	Extension Spring	1	L ≒ 54mm		☞{MC:12.21}
D	9	388N2527A	引張りコイルバネ	Extension Spring	1	L ≒ 41mm		☞{MC:12.21}
D	10	388N2526	引張りコイルバネ	Extension Spring	1	L ≒ 54mm		☞{MC:12.20}
D	11	388N2527A	引張りコイルバネ	Extension Spring	1	L ≒ 41mm		☞{MC:12.20}

10F 副走査部 6
SUB SCANNING UNIT 6




DETAIL A


DETAIL B

FR9H5A20.EPS

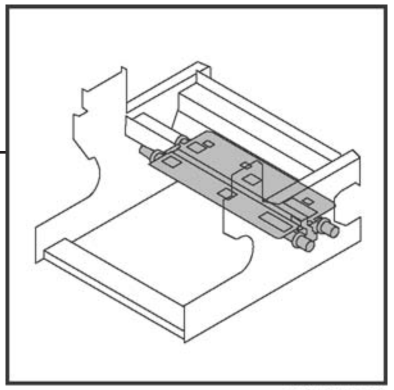
副走査部 6
SUB SCANNING UNIT 6
10F

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	319N3619	軸	Shaft	1			☞{MC:12.18}
E	2	356N9182A	ブラケット	Bracket	1			☞{MC:12.23}
D	3	387N100001	帯電防止材	Antistatic Brush	1			☞{MC:12.22}
D	4	118YX217D	モータ	Motor	1	MZ3		☞{MC:12.14}
D	5	146S0029/A	ホトインタラプタ	Photo Sensor	1	SZ4		☞{MC:12.19}
D	6.1	113Y1696C/D	ボードアセンブリ (SED17A)	Board Assembly (SED17A)	1	SZ1	#20001 or later	☞{MC:12.23}
D	6.2	113Y1738D	ボードアセンブリ (SED237A)	Board Assembly (SED23A)	1	SZ1	#50001 or later	☞{MC:12.23}
E	7	319N3957A/B	軸	Shaft	1			☞{MC:12.25}
D	8	322SF155	すべり軸受	Plain Bearing	1			☞{MC:12.25}
D	9	322SF155	すべり軸受	Plain Bearing	1			☞{MC:12.25}
D	10	327N0135E	歯車	Gear	1			☞{MC:12.18}
D	11	327N0136B	歯車	Gear	1			☞{MC:12.18}
E	12	327S4051R01	ウオーム	Warm Gear	1			☞{MC:12.14}
E	13	356N6871B	ブラケット	Bracket	1			☞{MC:12.25}
E	14	356N9237	ブラケット	Bracket	1			☞{MC:12.14}
D	15	360N0362D	ハウジング	Housing	1			☞{MC:12.19}
D	16	363N2060C	ガイド	Guide	1			☞{MC:12.25}
D	17	388N2435	引張りコイルバネ	Extension Spring	1	L ≒ 41mm		☞{MC:12.22}
D	18	602Y100002	ミラーアセンブリ	Mirror Assembly	1			☞{MC:12.24}

＊参考：（3B）はゆるみ止め接着剤を使用する箇所である。

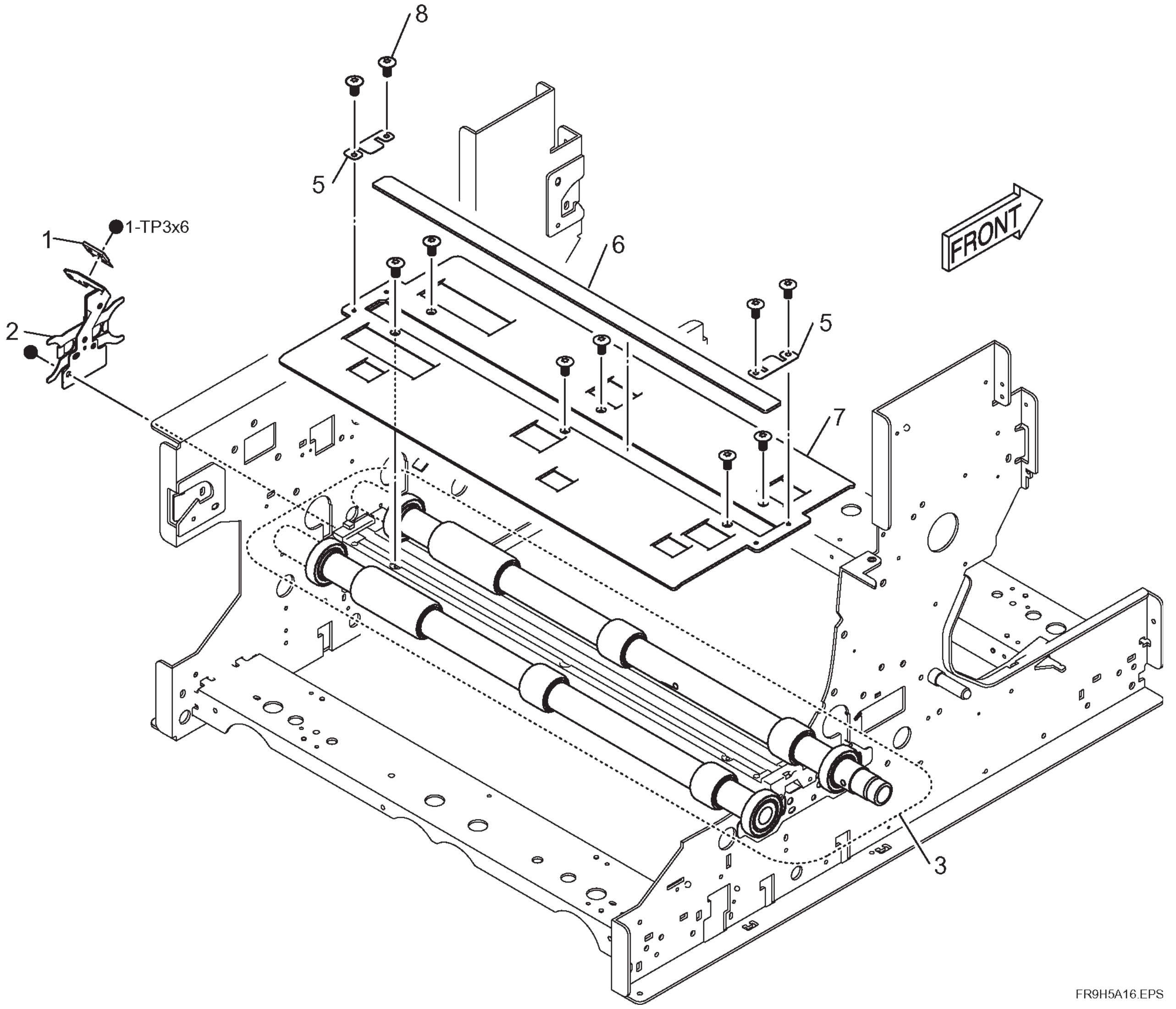
＊ REMARKS：（3B）indicates to use screw locking adhesive.

10G 副走査部 7
SUB SCANNING UNIT 7


FR9H5A57.EPS

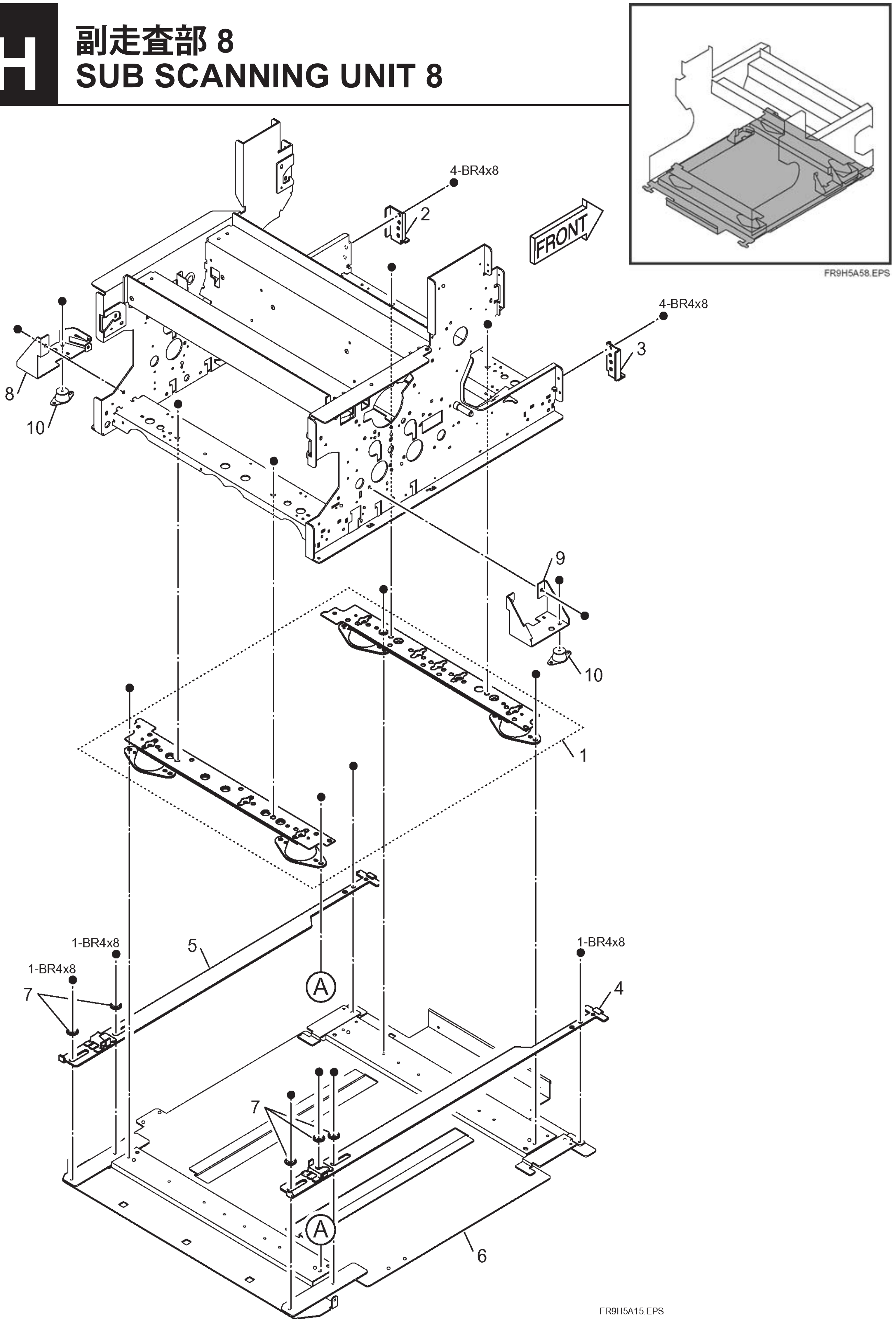
副走査部 7
SUB SCANNING UNIT 7 10G

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
D	1	387N0138C	帯電防止材	Antistatic Brush	1			–
E	2	401N0848B/C	押え板	Counter Plate	1			☞{MC:12.28}
D	3	334Y3219/A/B	ゴムローラ	Rubber Roller	1			☞{MC:12.28}
	4	***						
E	5	356N9198A	ブラケット	Bracket	2			☞{MC:12.26}
D	6	363N2156A	ガイド板	Guide plate	1			☞{MC:12.26}
D	7	363Y0495B/D	ガイド	Guide	1			☞{MC:12.27}
D	8	308S0320	特殊ネジ	Screw	10			☞{MC:12.26}


8
5
1
1-TP3x6
2
6
FRONT
5
7
3
FR9H5A16.EPS

10H 副走査部 8
SUB SCANNING UNIT 8

副走査部 8
SUB SCANNING UNIT 8 10H

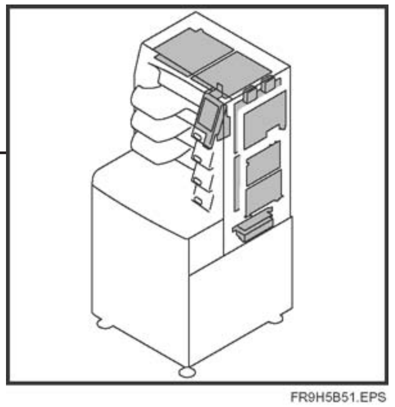


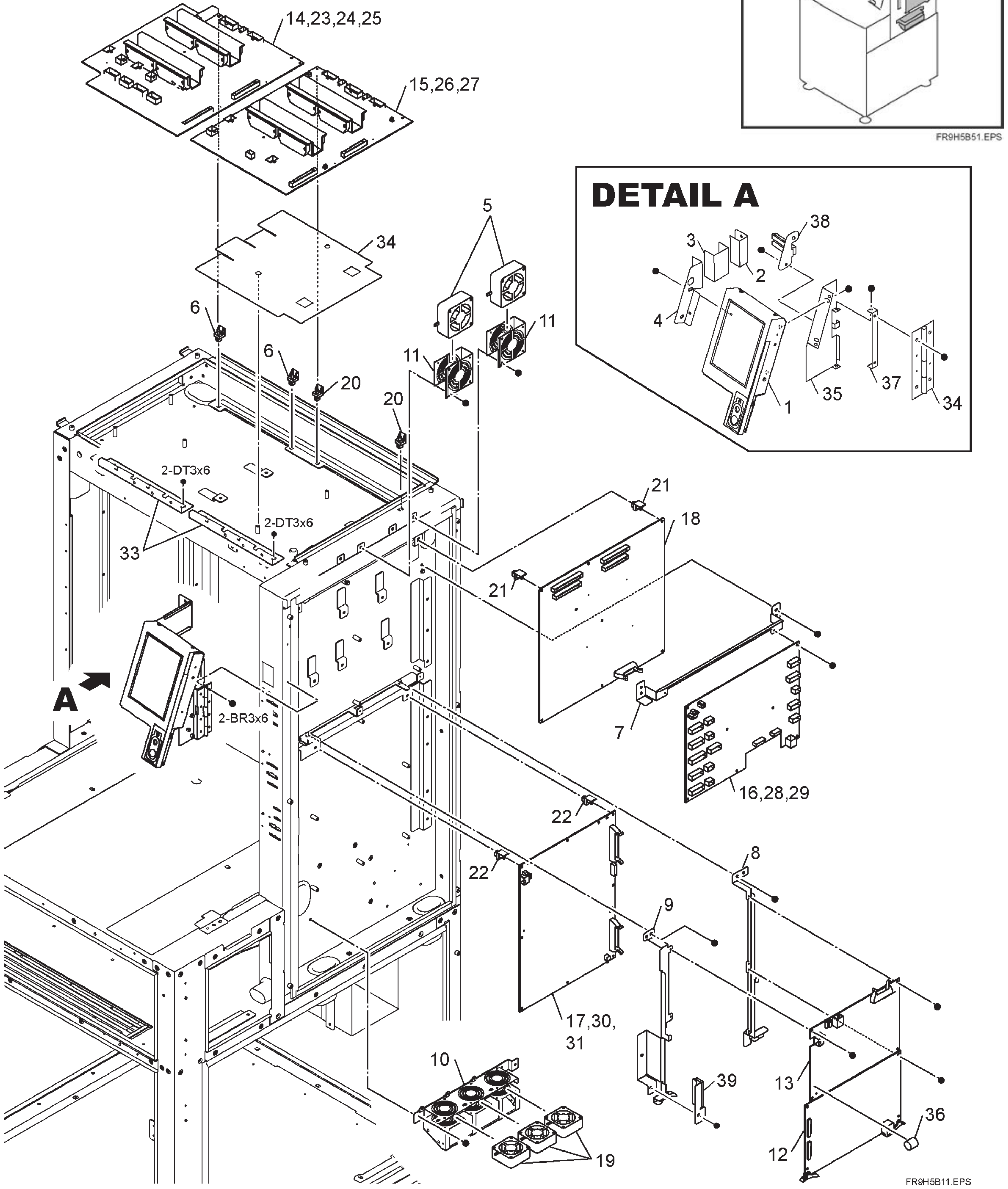
FR9H5A58.EPS

FR9H5A15.EPS

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	386Y0048	防振ゴムアセンブリ	Vibration Proof Rubber Assembly	1			☞{MC:12.32}
E	2	356N9239B	ブラケット	Bracket	1			–
E	3	356N9240B	ブラケット	Bracket	1			–
E	4	356N9415B	ブラケット	Bracket	1			–
E	5	356N9414B	ブラケット	Bracket	1			–
E	6	357N1460F	台	Base	1			–
E	7	347N1851A	スペーサ	Spacer	5			–
E	8	356N9484A	ブラケット	Bracket	1			☞{MC:12.30}
E	9	356N9485A	ブラケット	Bracket	1			☞{MC:12.30}
E	10	386Y0049	防振ゴム	Rubber Vibration Isolator	1	2 ヶ組／ A set of two		☞{MC:12.30}

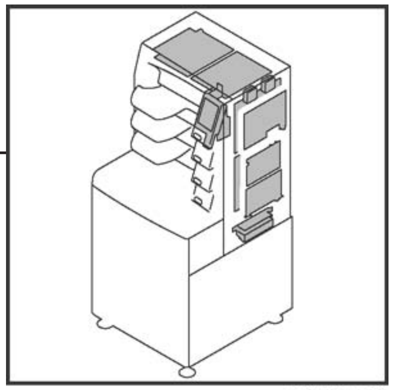
11A 制御部 1（#20001 以降）
CONTROLLER 1 (#20001 or Later)

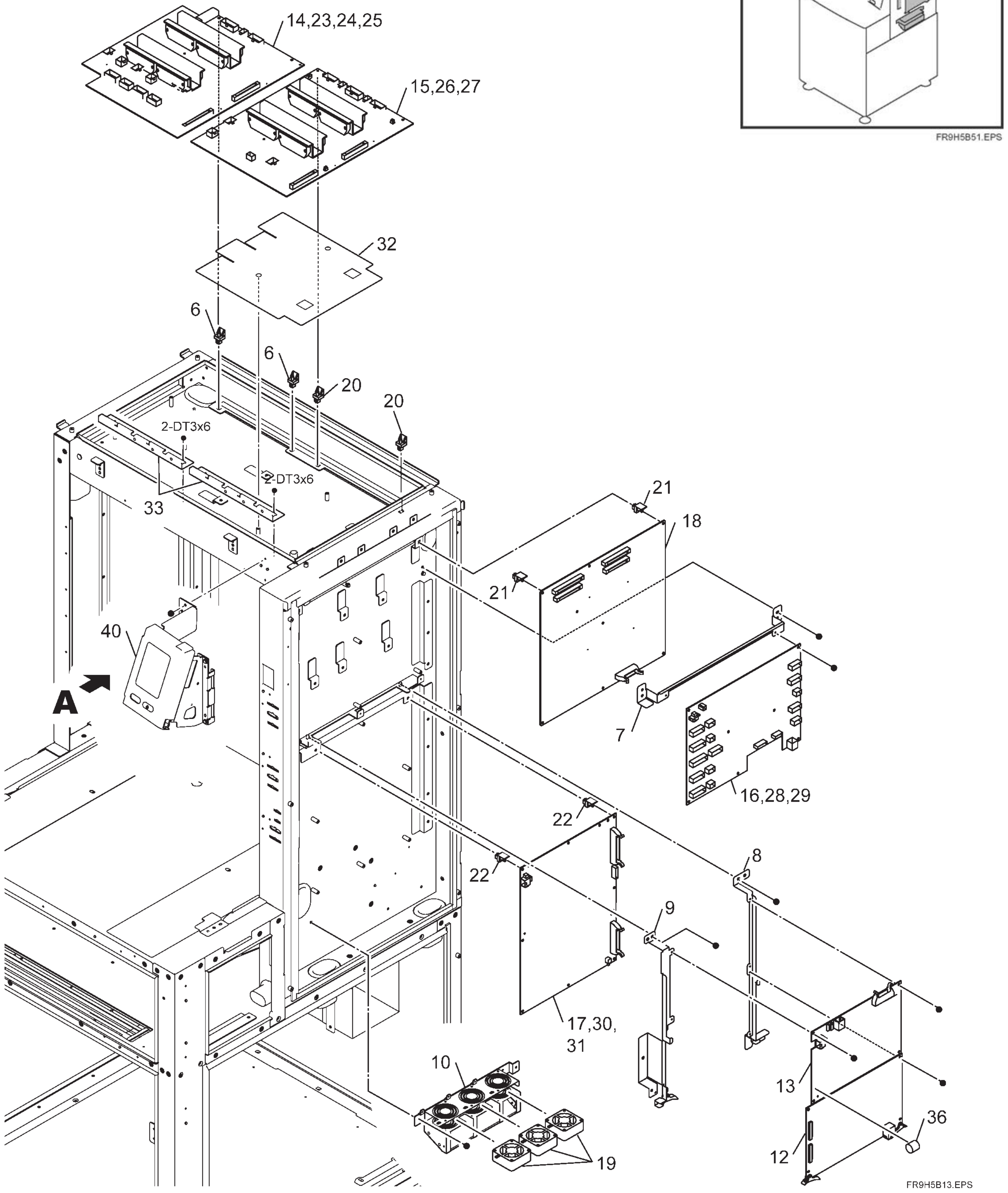




RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
CR	1	849Y0097B/D	LCD17A	LCD17A	1			☞{MC:4.8}
E	2	356N9578	ブラケット	Bracket	1			☞{MC:4.8}
E	3	356N9579	ブラケット	Bracket	1			☞{MC:4.8}
E	4	356N9580	ブラケット	Bracket	1			☞{MC:4.8}
D	5	119S0006/A/B	電動ファン	Fan	2	FANG1, 2		☞{MC:4.5}
E	6	316S0261	止め具	Clamp	2			–
E	7	356N9224C	ブラケット	Bracket	1			☞{MC:13.7}
E	8	356N9225B	ブラケット	Bracket	1			–
E	9	356N9226D	ブラケット	Bracket	1			–
E	10	356N9227C	ブラケット	Bracket	1			☞{MC:4.6}
E	11	364N0103B/C	ガード	Guard	2			☞{MC:4.5}
CR	12	113Y1677L	CPU91A	CPU91A	1			☞{MC:13.2}
CR	13	113Y1680G	IMG17A	IMG17A	1			☞{MC:13.3}
CR	14	113Y1700C	DRV17A	DRV17A	1			☞{MC:13.5}
CR	15	113Y1701C	DRV17B	DRV17B	1			☞{MC:13.6}
CR	16	113Y1699B	SNS17B	SNS17B	1			☞{MC:13.7}
CR	17	113Y1692C	SCN17A	SCN17A	1			☞{MC:13.4}
CR	18	113Y1698F	SNS17A	SNS17A	1			☞{MC:13.8}
D	19.1	119S0006/A/B	電動ファン	Fan	3	FANG3, 4, 5		☞{MC:4.6}
D	19.2	119Y100049	電動ファン	Fan	3	FANG3, 4, 5		☞{MC:4.6}
E	20	316S0261	止め具	Clamp	2			–
E	21	316S0261	止め具	Clamp	2			–
E	22	316S0261	止め具	Clamp	2			–
AT	23	137S1279	ヒューズ	FUSE	2	48V/4.0A For DRV17A		☞{MC:14.2}
AT	24	137S1278	ヒューズ	FUSE	13	48V/3.2A For DRV17A		☞{MC:14.2}
AT	25	137S1277	ヒューズ	FUSE	2	48V/2.0A For DRV17A		☞{MC:14.2}
AT	26	137S1278	ヒューズ	FUSE	11	48V/3.2A For DRV17B		☞{MC:14.3}
AT	27	137S1277	ヒューズ	FUSE	1	48V/2.0A For DRV17B		☞{MC:14.3}
AT	28	137S1278	ヒューズ	FUSE	1	48V/3.2A For SNS17B		☞{MC:14.4}
AT	29	137S1276	ヒューズ	FUSE	3	48V/1.6A For SNS17B		☞{MC:14.4}
AT	30	137S1278	ヒューズ	FUSE	1	48V/3.2A For SCN17A		☞{MC:14.5}
AT	31	137S1276	ヒューズ	FUSE	6	48V/1.6A For SCN17A		☞{MC:14.5}
E	32	139N0068	絶縁材	Insulator	1			–
E	33	363N2538A	ガイドレール	Guide Rail	2			–
E	34	314S0078	蝶番	Hinge	1			☞{MC:4.8}
E	35	356N9325F	ブラケット	Bracket	1			☞{MC:4.8}
A	36	125S0287	電池	Battery	1			☞{MC:13.9}
E	37	347Y0008	調整板	Adjustment Plate	1			☞{MC:4.8}
E	38	138Y0013	電気的フィルタアセンブリ	Electric filter Assembly	1			–
E	39	138Y0014	電気的フィルタアセンブリ	Electric filter Assembly	1			–

11B 制御部 2（#50001 以降）
CONTROLLER 2 (#50001 or Later)

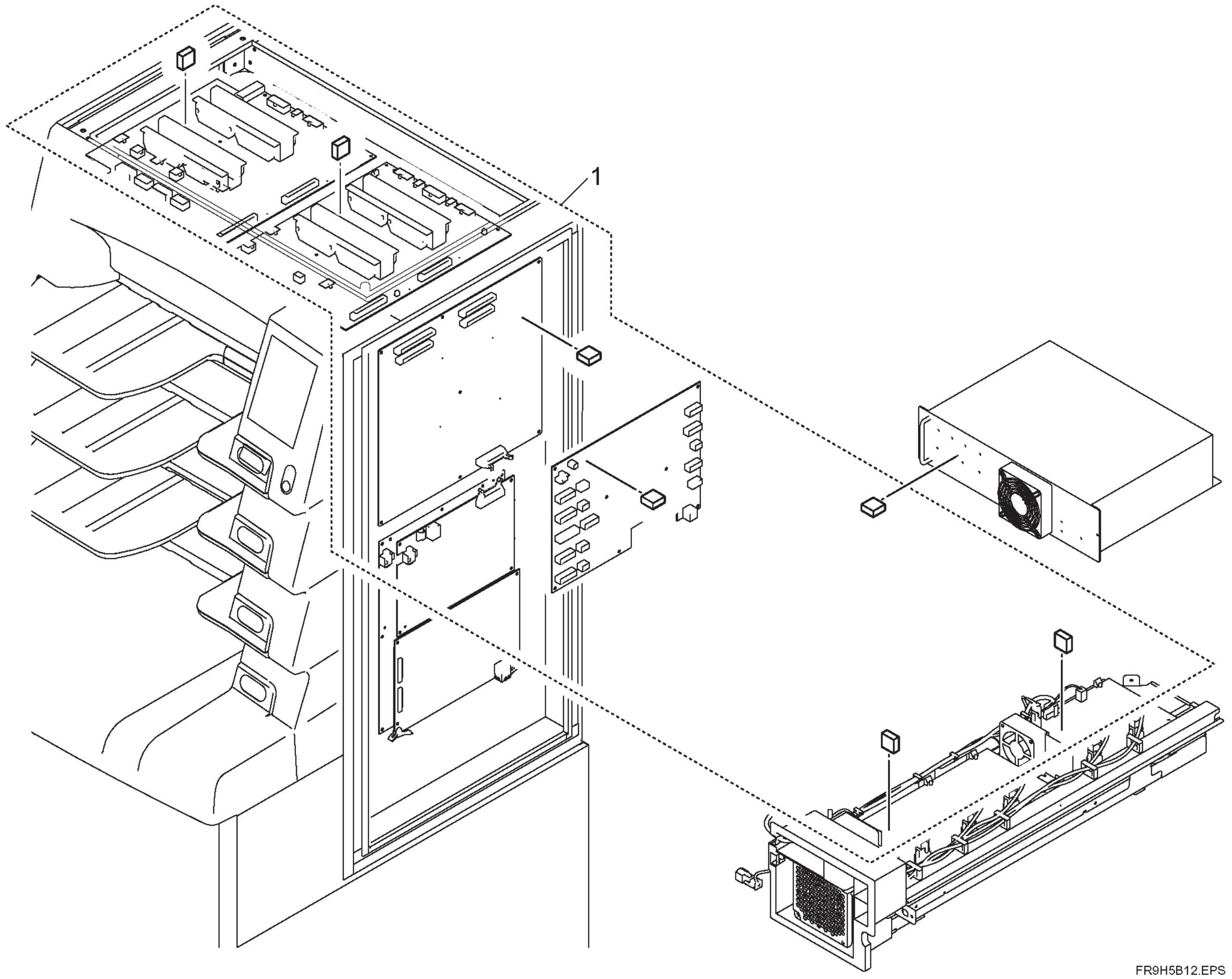




制御部 2（#50001 以降）
CONTROLLER 2 (#50001 or Later)
11B

RANK	REF.	PART NO.	PART NAME		QTY	REMARKS	SERIAL NO.	REFER TO
	1	***						
	2	***						
	3	***						
	4	***						
	5	***						
E	6	316S0261	止め具	Clamp	2			–
E	7	356N9224C	ブラケット	Bracket	1			☞{MC:13.7}
E	8	356N9225B	ブラケット	Bracket	1			–
E	9	356N9226D	ブラケット	Bracket	1			–
E	10	356N9227C	ブラケット	Bracket	1			☞{MC:4.6}
	11	***						
CR	12	113Y1677L	CPU91A	CPU91A	1			☞{MC:13.2}
CR	13	113Y1680G	IMG17A	IMG17A	1			☞{MC:13.3}
CR	14	113Y1700C	DRV17A	DRV17A	1			☞{MC:13.5}
CR	15	113Y1701C	DRV17B	DRV17B	1			☞{MC:13.6}
CR	16	113Y100416B	SNS17C	SNS17C	1			☞{MC:13.7}
CR	17	113Y1692C	SCN17A	SCN17A	1			☞{MC:13.4}
CR	18	113Y1698F	SNS17A	SNS17A	1			☞{MC:13.8}
D	19.1	119S0006/A/B	電動ファン	Fan	3	FANG3, 4, 5		☞{MC:4.6}
D	19.2	119Y100049	電動ファン	Fan	3	FANG3, 4, 5		☞{MC:4.6}
E	20	316S0261	止め具	Clamp	2			–
E	21	316S0261	止め具	Clamp	2			–
E	22	316S0261	止め具	Clamp	2			–
AT	23	137S1279	ヒューズ	FUSE	2	48V/4.0A For DRV17A		☞{MC:14.2}
AT	24	137S1278	ヒューズ	FUSE	13	48V/3.2A For DRV17A		☞{MC:14.2}
AT	25	137S1277	ヒューズ	FUSE	2	48V/2.0A For DRV17A		☞{MC:14.2}
AT	26	137S1278	ヒューズ	FUSE	11	48V/3.2A For DRV17B		☞{MC:14.3}
AT	27	137S1277	ヒューズ	FUSE	1	48V/2.0A For DRV17B		☞{MC:14.3}
AT	28	137S1278	ヒューズ	FUSE	1	48V/3.2A For SNS17C		☞{MC:14.4}
AT	29	137S1276	ヒューズ	FUSE	3	48V/1.6A For SNS17C		☞{MC:14.4}
AT	30	137S1278	ヒューズ	FUSE	1	48V/3.2A For SCN17A		☞{MC:14.5}
AT	31	137S1276	ヒューズ	FUSE	6	48V/1.6A For SCN17A		☞{MC:14.5}
E	32	139N0068	絶縁材	Insulator	1			–
E	33	363N2538A	ガイドレール	Guide Rail	2			–
	34	***						
	35	***						
A	36	125S0287	電池	Battery	1			☞{MC:13.9}
	37	***						
	38	***						
	39	***						
CR	40	849Y100055	ディスプレイアセンブリ（PNL29A）	Display Assembly (PNL29A)	1			☞{MC:4.8}

11C 制御部 3 CONTROLLER 3



制御部 3
CONTROLLER 3
11C

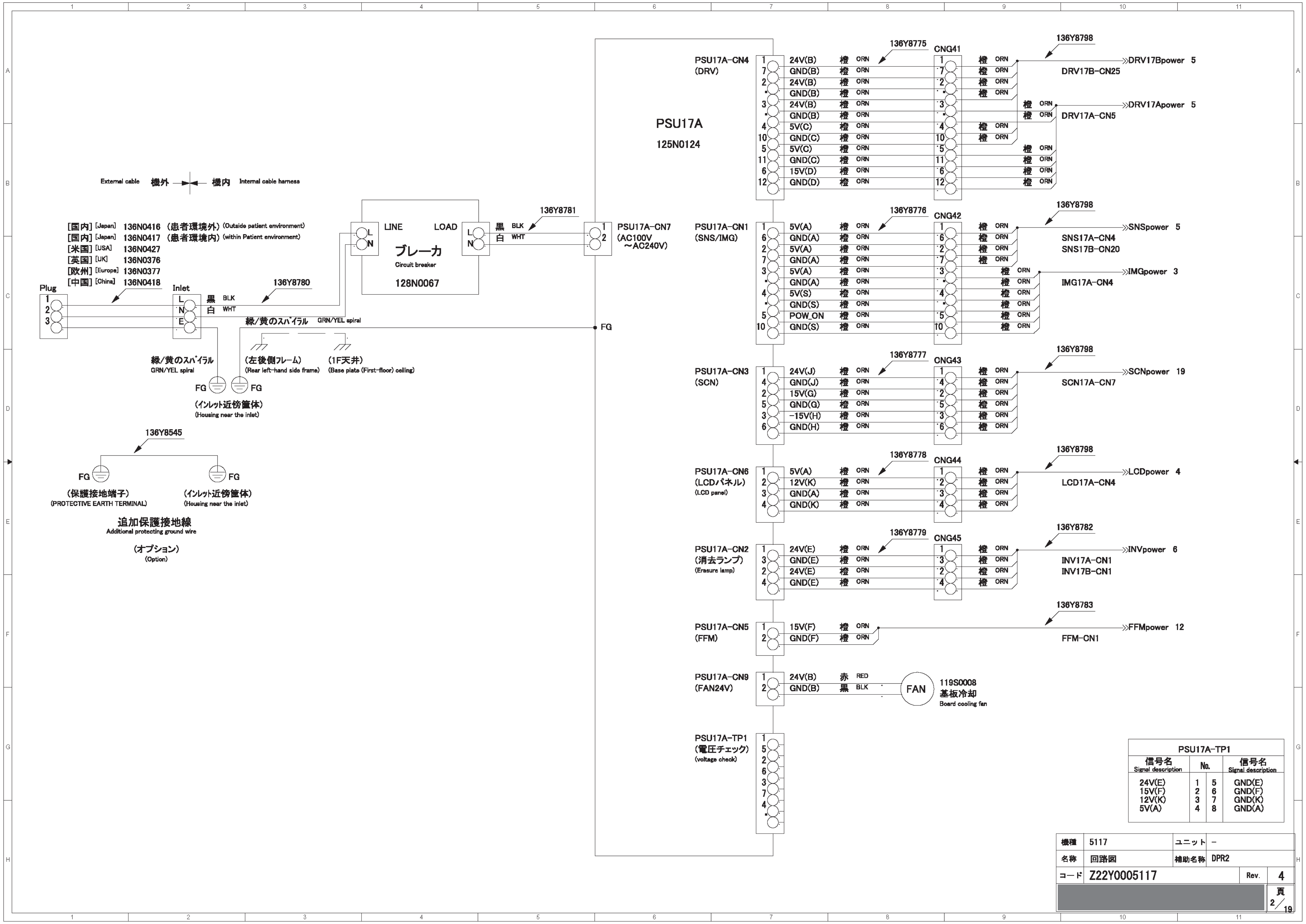
RANK	REF.	PART NO.	PART NAME	QTY	REMARKS	SERIAL NO.	REFER TO
AT	1	898Y1001	ヒューズキット Fuse Kit	1			–
		137S1175	ヒューズ Fuse	2	For INV17A/B		–
		137S1178	ヒューズ Fuse	2	For INV17A/B		–
		137S1276	ヒューズ Fuse	2	For PSU17A, SNS17B, SCN17A		–
		137S1277	ヒューズ Fuse	2	For DRV17A/B		–
		137S1278	ヒューズ Fuse	2	For DRV17A/B, SNS17B, SCN17A		–
		137S1279	ヒューズ Fuse	2	For DRV17A		–

12

ケーブル
CABLE

RANK	REF.	PART NO.	PART NAME	QTY.	REMARKS	SERIAL NO.	CONNECTION DIAGRAM
E	1	120Y0091A	ソケット Socket （ケーブル付） (with Cable)	1		#20001 or later	6/19
E	2	136N0376	ケーブル Cable	1	UK		2/19
E	3	136N0377	ケーブル Cable	1	Europe, Canada		2/19
E	4	136N0411B	ケーブル Cable	1			4/19
E	5	136N0412B	ケーブル Cable	1			3/19
E	6	136N0416	ケーブル Cable	1	Japan		2/19
E	7	136N0417/A	ケーブル Cable	1	Japan		2/19
E	8	136N0418	ケーブル Cable	1	China		2/19
E	9	136N0420A	ケーブル Cable	2			4/19
E	10	136N0427	ケーブル Cable	1	USA		2/19
E	11	136Y8545A	ケーブル Cable	1			2/19
E	12	136Y8737E/F	ケーブル Cable	1		#20001 or later	7/19
E	13	136Y8738D	ケーブル Cable	1			7/19
E	14	136Y8739E/F	ケーブル Cable	1		#20001 or later	7/19
E	15	136Y8740C	ケーブル Cable	1			7/19
E	16	136Y8741E/F	ケーブル Cable	1		#20001 or later	8/19
E	17	136Y8742C	ケーブル Cable	1			8/19
E	18	136Y8743E/F	ケーブル Cable	1		#20001 or later	8/19
E	19	136Y8744B	ケーブル Cable	1			8/19
E	20	136Y8745C	ケーブル Cable	1			8/19
E	21	136Y8746C	ケーブル Cable	1			13/19
E	22	136Y8747C	ケーブル Cable	1			13/19
E	23	136Y8748C	ケーブル Cable	1			13/19
E	24	136Y8749C	ケーブル Cable	1			13/19
E	25	136Y8750C	ケーブル Cable	1			14/19
E	26	136Y8751C	ケーブル Cable	1			14/19
E	27	136Y8752C	ケーブル Cable	1			14/19
E	28	136Y8753C	ケーブル Cable	1			14/19
E	29	136Y8754C	ケーブル Cable	1			9/19
E	30	136Y8755D	ケーブル Cable	1			9/19
E	31	136Y8756B	ケーブル Cable	1			15/19
E	32	136Y8757C	ケーブル Cable	1			10/19
E	33	136Y8758B	ケーブル Cable	1			15/19
E	34	136Y8759D	ケーブル Cable	1			10/19
E	35	136Y8760D	ケーブル Cable	1			16/19
E	36	136Y8761C	ケーブル Cable	1			11/19
E	37	136Y8764B	ケーブル Cable	1			16/19
E	38	136Y8765D	ケーブル Cable	1		#20001 or later	11/19
E	39	136Y8766C	ケーブル Cable	1		#20001 or later	6/19
E	40	136Y8767C/D	ケーブル Cable	1		#20001 or later	6/19
E	41	136Y8768C	ケーブル Cable	1		#20001 or later	6/19
E	42	136Y8769C	ケーブル Cable	1			12/19
E	43	136Y8770B	ケーブル Cable	1			17/19
E	44	136Y8921C	ケーブル Cable	7			18/19
E	45	136Y8772	ケーブル Cable	1			16/19
E	46	136Y8775B	ケーブル Cable	1		#20001 or later	2/19
E	47	136Y8776B	ケーブル Cable	1		#20001 or later	2/19
E	48	136Y8777B	ケーブル Cable	1		#20001 or later	2/19
E	49	136Y8778B	ケーブル Cable	1		#20001 or later	2/19
E	50	136Y8779B	ケーブル Cable	1		#20001 or later	2/19
E	51	136Y8780D	ケーブル Cable	1		#20001 or later	2/19
E	52	136Y8781D	ケーブル Cable	1		#20001 or later	2/19
E	53	136Y8782B	ケーブル Cable	2		#20001 or later	2/19,6/19
E	54	136Y8783C	ケーブル Cable	2		#20001 or later	2/19,12/19
E	55	136Y8784D	ケーブル Cable	1			5/19
E	56	136Y8785D	ケーブル Cable	1			5/19
E	57	136Y8786C	ケーブル Cable	1			5/19
E	58	136Y8787D	ケーブル Cable	1			5/19
E	59	136Y8788C	ケーブル Cable	2			3/19, 5/19,
E	60	136Y8789E	ケーブル Cable	4			3/19,5/19,7/19
E	61	136Y8790D	ケーブル Cable	2			7/19
E	62	136Y8791D	ケーブル Cable	2			8/19
E	63	136Y8792C	ケーブル Cable	4			8/19,11/19
E	64	136Y8793D	ケーブル Cable	2			9/19
E	65	136Y8794E	ケーブル Cable	6			10/19,12/19,18/19
E	66	136Y8795F	ケーブル Cable	4			18/19,19/19
E	67	136Y8796C	ケーブル Cable	8			13/19,14/19
E	68	136Y8797C	ケーブル Cable	10			15/19,16/19,17/19,
E	69	136Y8798E	ケーブル Cable	11			2/19,3/19,4/19, 5/19,17/19,19/19
E	70	136Y102192B	ケーブル Cable	1		#50001 or later	
E	71	136Y102193B	ケーブル Cable	1		#50001 or later	
E	72	136Y102194B	ケーブル Cable	1		#50001 or later	
E	73	136Y102195B	ケーブル Cable	1		#50001 or later	
E	74	136Y102173C	ケーブル Cable	1		#50001 or later	
E	75	136Y102188B	ケーブル Cable	1		#50001 or later	
E	76	136Y102174B	ケーブル Cable	1		#50001 or later	
E	77	136Y102175B	ケーブル Cable	1		#50001 or later	
E	78	136Y102176B	ケーブル Cable	1		#50001 or later	

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


External cable 機外 機内 Internal cable harness
[国内] [Japan] 136N0416 (患者環境外) (Outside patient environment)
[国内] [Japan] 136N0417 (患者環境内) (within Patient environment)
[米国] [USA] 136N0427
[英国] [UK] 136N0376
[欧州] [Europe] 136N0377
[中国] [China] 136N0418
Plug
1
2
3
Inlet
L
N
E
黒 BLK
白 WHT
136Y8780
緑/黄のスパイラル GRN/YEL spiral
緑/黄のスパイラル
GRN/YEL spiral
(左後側フレーム)
(Rear left-hand side frame)
(1F天井)
(Base plate (First-floor) ceiling)
FG
FG
(インレット近傍筐体)
(Housing near the inlet)
136Y8545
FG
(保護接地端子)
(PROTECTIVE EARTH TERMINAL)
FG
(インレット近傍筐体)
(Housing near the inlet)
追加保護接地線
Additional protecting ground wire
(オプション)
(Option)
LINE
LOAD
ブレーカ
Circuit breaker
128N0067
136Y8781
黒 BLK
白 WHT
PSU17A-CN7
(AC100V
~AC240V)
FG
PSU17A
125N0124
PSU17A-CN4
(DRV)
24V(B)
GND(B)
24V(B)
GND(B)
24V(B)
GND(B)
5V(C)
GND(C)
5V(C)
GND(C)
15V(D)
GND(D)
橙 ORN
136Y8775
CNG41
136Y8798
DRV17Bpower 5
DRV17B-CN25
DRV17Apower 5
DRV17A-CN5
PSU17A-CN1
(SNS/IMG)
5V(A)
GND(A)
5V(A)
GND(A)
5V(A)
GND(A)
5V(S)
GND(S)
POW_ON
GND(S)
136Y8776
CNG42
136Y8798
SNSpower 5
SNS17A-CN4
SNS17B-CN20
IMGpower 3
IMG17A-CN4
PSU17A-CN3
(SCN)
24V(J)
GND(J)
15V(G)
GND(G)
−15V(H)
GND(H)
136Y8777
CNG43
136Y8798
SCNpower 19
SCN17A-CN7
PSU17A-CN6
(LCDパネル)
(LCD panel)
5V(A)
12V(K)
GND(A)
GND(K)
136Y8778
CNG44
136Y8798
LCDpower 4
LCD17A-CN4
PSU17A-CN2
(消去ランプ)
(Erasure lamp)
24V(E)
GND(E)
24V(E)
GND(E)
136Y8779
CNG45
136Y8782
INVpower 6
INV17A-CN1
INV17B-CN1
PSU17A-CN5
(FFM)
15V(F)
GND(F)
136Y8783
FFMpower 12
FFM-CN1
PSU17A-CN9
(FAN24V)
24V(B) 赤 RED
GND(B) 黒 BLK
FAN
119S0008
基板冷却
Board cooling fan
PSU17A-TP1
(電圧チェック)
(voltage check)
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H

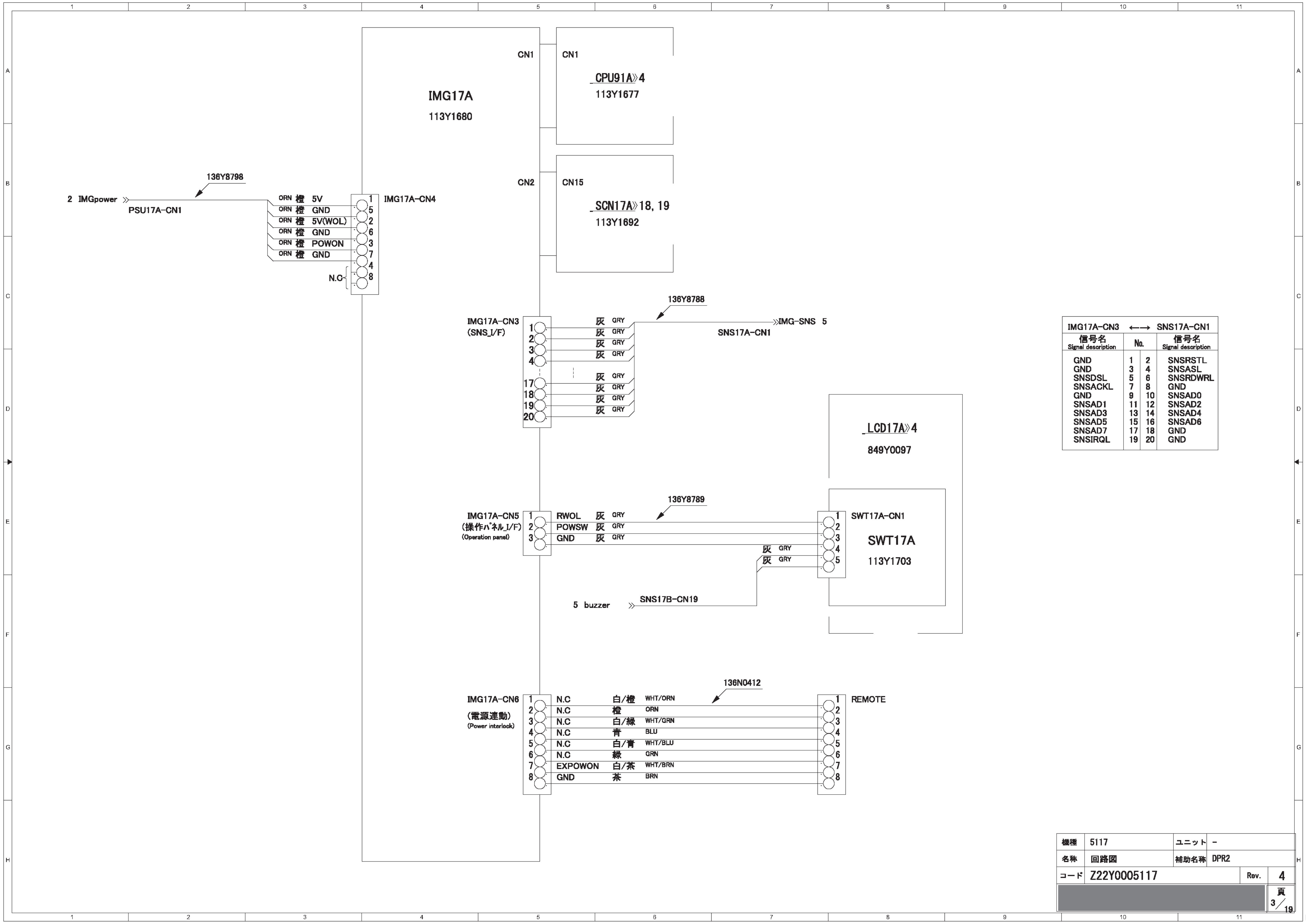
PSU17A-TP1			
信号名 Signal description	No.		信号名 Signal description
24V(E)	1	5	GND(E)
15V(F)	2	6	GND(F)
12V(K)	3	7	GND(K)
5V(A)	4	8	GND(A)

機種	5117	ユニット	−
名称	回路図	補助名称	DPR2
コード	Z22Y0005117	Rev.	4
[redacted]		頁	2/19

FR9H5D02.EPS

13A

回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)

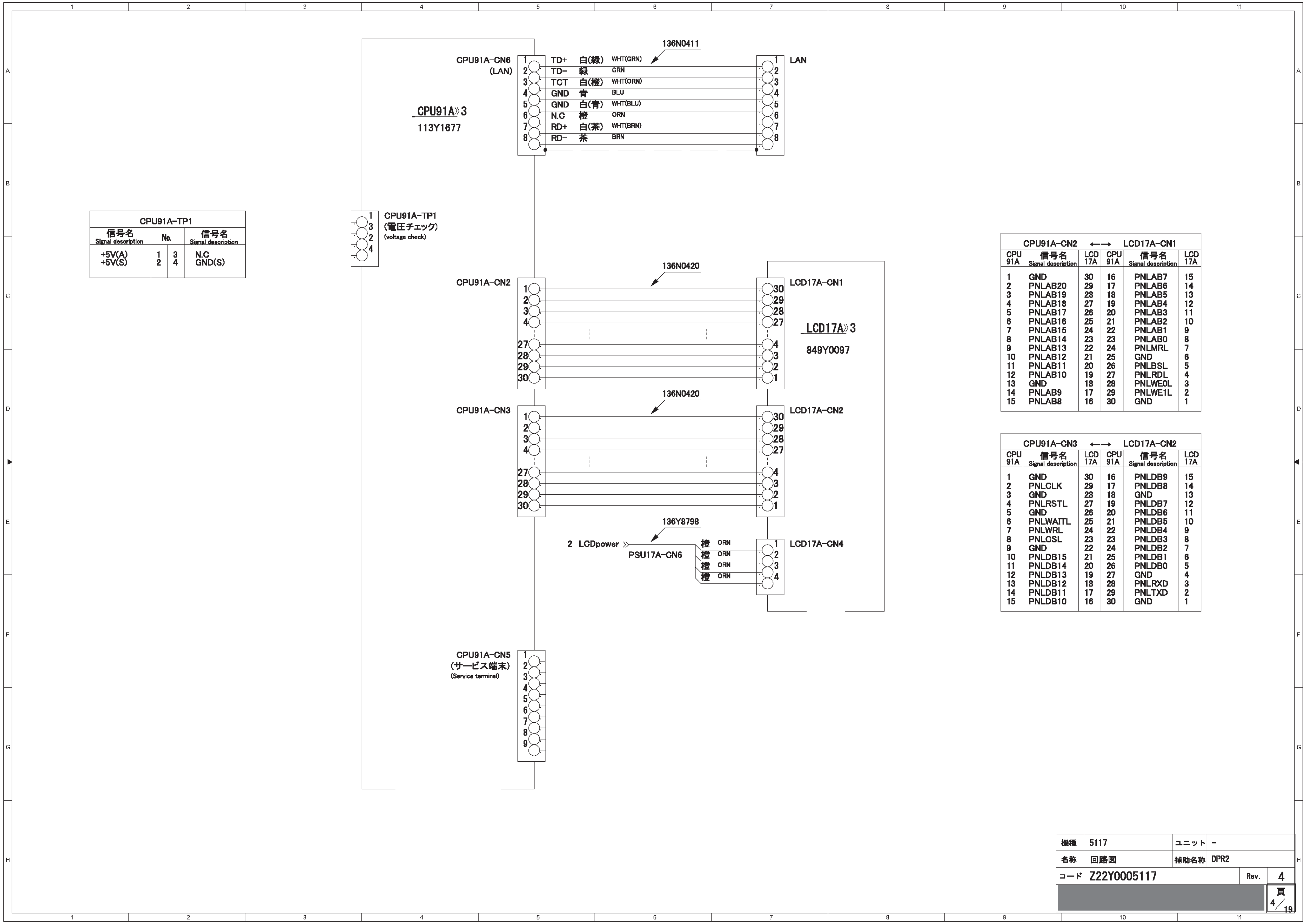

IMG17A
113Y1680
CN1
CN1
CPU91A》4
113Y1677
CN2
CN15
SCN17A》18, 19
113Y1692
2 IMGpower 》
PSU17A-CN1
136Y8798
ORN 橙 5V
ORN 橙 GND
ORN 橙 5V(WOL)
ORN 橙 GND
ORN 橙 POWON
ORN 橙 GND
N.C
1 5 2 6 3 7 4 8
IMG17A-CN4
IMG17A-CN3
(SNS_I/F)
1 2 3 4 17 18 19 20
灰 GRY
136Y8788
》IMG-SNS 5
SNS17A-CN1
LCD17A》4
849Y0097
IMG17A-CN5
(操作ﾊﾟﾈﾙ_I/F)
(Operation panel)
RWOL 灰 GRY
POWSW 灰 GRY
GND 灰 GRY
灰 GRY
灰 GRY
136Y8789
SWT17A-CN1
1 2 3 4 5
SWT17A
113Y1703
5 buzzer 》
SNS17B-CN19
IMG17A-CN6
(電源連動)
(Power interlock)
136N0412
N.C 白/橙 WHT/ORN
N.C 橙 ORN
N.C 白/緑 WHT/GRN
N.C 青 BLU
N.C 白/青 WHT/BLU
N.C 緑 GRN
EXPOWON 白/茶 WHT/BRN
GND 茶 BRN
1 2 3 4 5 6 7 8
REMOTE
FR9H5D03.EPS

IMG17A-CN3 ⟷ SNS17A-CN1

信号名 Signal description	No.	No.	信号名 Signal description
GND	1	2	SNSRSTL
GND	3	4	SNSASL
SNSDSL	5	6	SNSRDWRL
SNSACKL	7	8	GND
GND	9	10	SNSAD0
SNSAD1	11	12	SNSAD2
SNSAD3	13	14	SNSAD4
SNSAD5	15	16	SNSAD6
SNSAD7	17	18	GND
SNSIRQL	19	20	GND

機種	5117	ユニット	－
名称	回路図	補助名称	DPR2
コード	Z22Y0005117	Rev.	4
[redacted]		頁	3／19

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


CPU91A》3
113Y1677
CPU91A-CN6
(LAN)
136N0411
1 TD+ 白(緑) WHT(GRN)
2 TD− 緑 GRN
3 TCT 白(橙) WHT(ORN)
4 GND 青 BLU
5 GND 白(青) WHT(BLU)
6 N.C 橙 ORN
7 RD+ 白(茶) WHT(BRN)
8 RD− 茶 BRN
LAN
CPU91A-TP1
(電圧チェック)
(voltage check)
CPU91A-CN2
136N0420
LCD17A-CN1
LCD17A》3
849Y0097
CPU91A-CN3
136N0420
LCD17A-CN2
136Y8798
2 LCDpower》
PSU17A-CN6
橙 ORN
LCD17A-CN4
CPU91A-CN5
(サービス端末)
(Service terminal)

CPU91A-TP1			
信号名 Signal description	No.		信号名 Signal description
+5V(A)	1	3	N.C
+5V(S)	2	4	GND(S)

CPU91A-CN2 ←→ LCD17A-CN1

CPU 91A	信号名 Signal description	LCD 17A	CPU 91A	信号名 Signal description	LCD 17A
1	GND	30	16	PNLAB7	15
2	PNLAB20	29	17	PNLAB6	14
3	PNLAB19	28	18	PNLAB5	13
4	PNLAB18	27	19	PNLAB4	12
5	PNLAB17	26	20	PNLAB3	11
6	PNLAB16	25	21	PNLAB2	10
7	PNLAB15	24	22	PNLAB1	9
8	PNLAB14	23	23	PNLAB0	8
9	PNLAB13	22	24	PNLMRL	7
10	PNLAB12	21	25	GND	6
11	PNLAB11	20	26	PNLBSL	5
12	PNLAB10	19	27	PNLRDL	4
13	GND	18	28	PNLWE0L	3
14	PNLAB9	17	29	PNLWE1L	2
15	PNLAB8	16	30	GND	1

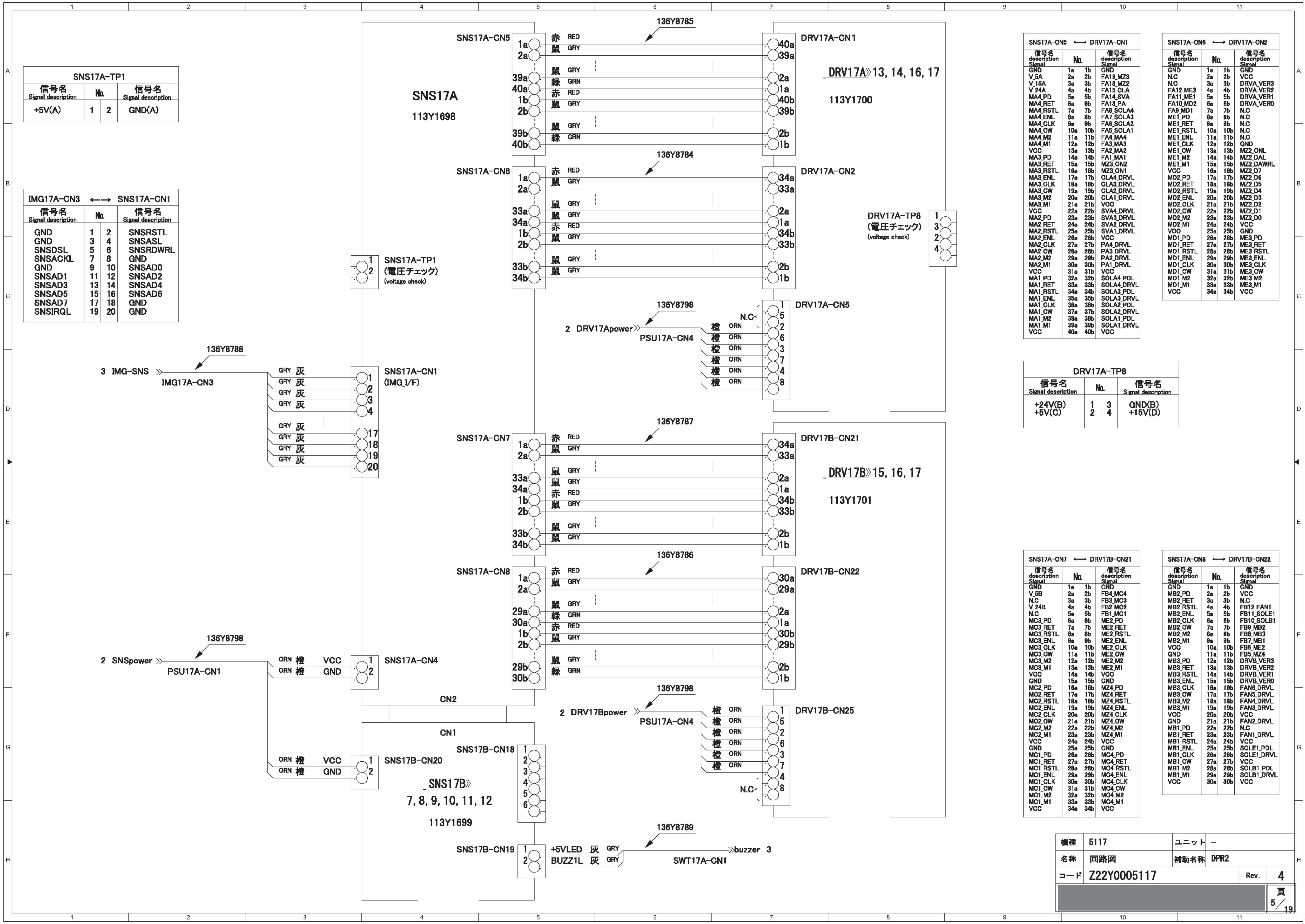
CPU91A-CN3 ←→ LCD17A-CN2

CPU 91A	信号名 Signal description	LCD 17A	CPU 91A	信号名 Signal description	LCD 17A
1	GND	30	16	PNLDB9	15
2	PNLCLK	29	17	PNLDB8	14
3	GND	28	18	GND	13
4	PNLRSTL	27	19	PNLDB7	12
5	GND	26	20	PNLDB6	11
6	PNLWAITL	25	21	PNLDB5	10
7	PNLWRL	24	22	PNLDB4	9
8	PNLCSL	23	23	PNLDB3	8
9	GND	22	24	PNLDB2	7
10	PNLDB15	21	25	PNLDB1	6
11	PNLDB14	20	26	PNLDB0	5
12	PNLDB13	19	27	GND	4
13	PNLDB12	18	28	PNLRXD	3
14	PNLDB11	17	29	PNLTXD	2
15	PNLDB10	16	30	GND	1

機種	5117	ユニット	−	
名称	回路図	補助名称	DPR2	
コード	Z22Y0005117		Rev.	4
[redacted]				頁 4/19

FR9H5D04.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


SNS17A
113Y1698
SNS17A-CN5
SNS17A-CN6
SNS17A-CN7
SNS17A-CN8
SNS17A-TP1
(電圧チェック)
(voltage check)
SNS17A-CN1
(IMG_I/F)
SNS17A-CN4
CN2
CN1
136Y8785
136Y8784
136Y8787
136Y8786
136Y8798
136Y8788
136Y8789
DRV17A-CN1
DRV17A-CN2
DRV17A-CN5
DRV17A》13, 14, 16, 17
113Y1700
DRV17A-TP8
(電圧チェック)
(voltage check)
DRV17B-CN21
DRV17B-CN22
DRV17B-CN25
DRV17B》15, 16, 17
113Y1701
2 DRV17Apower》
2 DRV17Bpower》
PSU17A-CN4
N.C
3 IMG-SNS》
IMG17A-CN3
2 SNSpower》
PSU17A-CN1
VCC
GND
SNS17B-CN18
SNS17B-CN19
SNS17B-CN20
SNS17B》
7, 8, 9, 10, 11, 12
113Y1699
+5VLED
BUZZ1L
》buzzer 3
SWT17A-CN1
赤 RED
鼠 GRY
緑 GRN
灰 GRY
橙 ORN
1a
2a
39a
40a
1b
2b
39b
40b
33a
34a
33b
34b
29a
30a
29b
30b
A
B
C
D
E
F
G
H
1
2
3
4
5
6
7
8
9
10
11

SNS17A-TP1

信号名 Signal description	No.	No.	信号名 Signal description
+5V(A)	1	2	GND(A)

IMG17A-CN3 ←→ SNS17A-CN1

信号名 Signal description	No.	No.	信号名 Signal description
GND	1	2	SNSRSTL
GND	3	4	SNSASL
SNSDSL	5	6	SNSRDWRL
SNSACKL	7	8	GND
GND	9	10	SNSAD0
SNSAD1	11	12	SNSAD2
SNSAD3	13	14	SNSAD4
SNSAD5	15	16	SNSAD6
SNSAD7	17	18	GND
SNSIRQL	19	20	GND

SNS17A-CN5 ←→ DRV17A-CN1

信号名 description Signal	No.	No.	信号名 description Signal
GND	1a	1b	GND
V_5A	2a	2b	FA19_MZ3
V_15A	3a	3b	FA18_MZ2
V_24A	4a	4b	FA15_CLA
MA4_PD	5a	5b	FA14_SVA
MA4_RET	6a	6b	FA13_PA
MA4_RSTL	7a	7b	FA8_SOLA4
MA4_ENL	8a	8b	FA7_SOLA3
MA4_CLK	9a	9b	FA6_SOLA2
MA4_CW	10a	10b	FA5_SOLA1
MA4_M2	11a	11b	FA4_MA4
MA4_M1	12a	12b	FA3_MA3
VCC	13a	13b	FA2_MA2
MA3_PD	14a	14b	FA1_MA1
MA3_RET	15a	15b	MZ3_ON2
MA3_RSTL	16a	16b	MZ3_ON1
MA3_ENL	17a	17b	CLA4_DRVL
MA3_CLK	18a	18b	CLA3_DRVL
MA3_CW	19a	19b	CLA2_DRVL
MA3_M2	20a	20b	CLA1_DRVL
MA3_M1	21a	21b	VCC
VCC	22a	22b	SVA4_DRVL
MA2_PD	23a	23b	SVA3_DRVL
MA2_RET	24a	24b	SVA2_DRVL
MA2_RSTL	25a	25b	SVA1_DRVL
MA2_ENL	26a	26b	VCC
MA2_CLK	27a	27b	PA4_DRVL
MA2_CW	28a	28b	PA3_DRVL
MA2_M2	29a	29b	PA2_DRVL
MA2_M1	30a	30b	PA1_DRVL
VCC	31a	31b	VCC
MA1_PD	32a	32b	SOLA4_PDL
MA1_RET	33a	33b	SOLA4_DRVL
MA1_RSTL	34a	34b	SOLA3_PDL
MA1_ENL	35a	35b	SOLA3_DRVL
MA1_CLK	36a	36b	SOLA2_PDL
MA1_CW	37a	37b	SOLA2_DRVL
MA1_M2	38a	38b	SOLA1_PDL
MA1_M1	39a	39b	SOLA1_DRVL
VCC	40a	40b	VCC

SNS17A-CN6 ←→ DRV17A-CN2

信号名 description Signal	No.	No.	信号名 description Signal
GND	1a	1b	GND
N.C	2a	2b	VCC
N.C	3a	3b	DRVA_VER3
FA12_ME3	4a	4b	DRVA_VER2
FA11_ME1	5a	5b	DRVA_VER1
FA10_MD2	6a	6b	DRVA_VER0
FA9_MD1	7a	7b	N.C
ME1_PD	8a	8b	N.C
ME1_RET	9a	9b	N.C
ME1_RSTL	10a	10b	N.C
ME1_ENL	11a	11b	N.C
ME1_CLK	12a	12b	GND
ME1_CW	13a	13b	MZ2_ONL
ME1_M2	14a	14b	MZ2_DAL
ME1_M1	15a	15b	MZ2_DAWRL
VCC	16a	16b	MZ2_D7
MD2_PD	17a	17b	MZ2_D6
MD2_RET	18a	18b	MZ2_D5
MD2_RSTL	19a	19b	MZ2_D4
MD2_ENL	20a	20b	MZ2_D3
MD2_CLK	21a	21b	MZ2_D2
MD2_CW	22a	22b	MZ2_D1
MD2_M2	23a	23b	MZ2_D0
MD2_M1	24a	24b	VCC
VCC	25a	25b	GND
MD1_PD	26a	26b	ME3_PD
MD1_RET	27a	27b	ME3_RET
MD1_RSTL	28a	28b	ME3_RSTL
MD1_ENL	29a	29b	ME3_ENL
MD1_CLK	30a	30b	ME3_CLK
MD1_CW	31a	31b	ME3_CW
MD1_M2	32a	32b	ME3_M2
MD1_M1	33a	33b	ME3_M1
VCC	34a	34b	VCC

DRV17A-TP8

信号名 Signal description	No.	No.	信号名 Signal description
+24V(B)	1	3	GND(B)
+5V(C)	2	4	+15V(D)

SNS17A-CN7 ←→ DRV17B-CN21

信号名 description Signal	No.	No.	信号名 description Signal
GND	1a	1b	GND
V_5B	2a	2b	FB4_MC4
N.C	3a	3b	FB3_MC3
V_24B	4a	4b	FB2_MC2
N.C	5a	5b	FB1_MC1
MC3_PD	6a	6b	ME2_PD
MC3_RET	7a	7b	ME2_RET
MC3_RSTL	8a	8b	ME2_RSTL
MC3_ENL	9a	9b	ME2_ENL
MC3_CLK	10a	10b	ME2_CLK
MC3_CW	11a	11b	ME2_CW
MC3_M2	12a	12b	ME2_M2
MC3_M1	13a	13b	ME2_M1
VCC	14a	14b	VCC
GND	15a	15b	GND
MC2_PD	16a	16b	MZ4_PD
MC2_RET	17a	17b	MZ4_RET
MC2_RSTL	18a	18b	MZ4_RSTL
MC2_ENL	19a	19b	MZ4_ENL
MC2_CLK	20a	20b	MZ4_CLK
MC2_CW	21a	21b	MZ4_CW
MC2_M2	22a	22b	MZ4_M2
MC2_M1	23a	23b	MZ4_M1
VCC	24a	24b	VCC
GND	25a	25b	GND
MC1_PD	26a	26b	MC4_PD
MC1_RET	27a	27b	MC4_RET
MC1_RSTL	28a	28b	MC4_RSTL
MC1_ENL	29a	29b	MC4_ENL
MC1_CLK	30a	30b	MC4_CLK
MC1_CW	31a	31b	MC4_CW
MC1_M2	32a	32b	MC4_M2
MC1_M1	33a	33b	MC4_M1
VCC	34a	34b	VCC

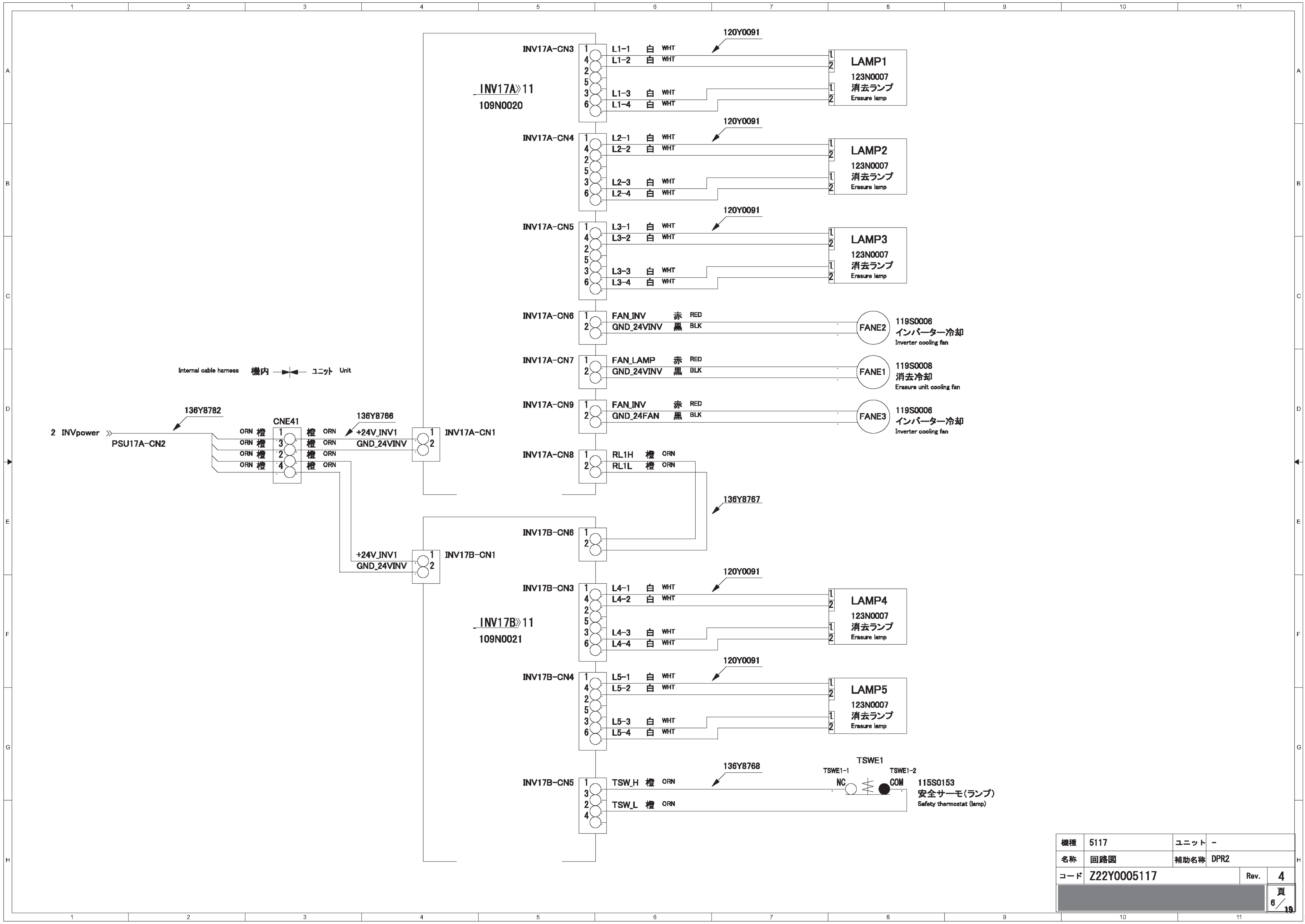
SNS17A-CN8 ←→ DRV17B-CN22

信号名 description Signal	No.	No.	信号名 description Signal
GND	1a	1b	GND
MB2_PD	2a	2b	VCC
MB2_RET	3a	3b	N.C
MB2_RSTL	4a	4b	FB12_FAN1
MB2_ENL	5a	5b	FB11_SOLE1
MB2_CLK	6a	6b	FB10_SOLB1
MB2_CW	7a	7b	FB9_MB2
MB2_M2	8a	8b	FB8_MB3
MB2_M1	9a	9b	FB7_MB1
VCC	10a	10b	FB6_ME2
GND	11a	11b	FB5_MZ4
MB3_PD	12a	12b	DRVB_VER3
MB3_RET	13a	13b	DRVB_VER2
MB3_RSTL	14a	14b	DRVB_VER1
MB3_ENL	15a	15b	DRVB_VER0
MB3_CLK	16a	16b	FAN6_DRVL
MB3_CW	17a	17b	FAN5_DRVL
MB3_M2	18a	18b	FAN4_DRVL
MB3_M1	19a	19b	FAN3_DRVL
VCC	20a	20b	VCC
GND	21a	21b	FAN2_DRVL
MB1_PD	22a	22b	N.C
MB1_RET	23a	23b	FAN1_DRVL
MB1_RSTL	24a	24b	VCC
MB1_ENL	25a	25b	SOLE1_PDL
MB1_CLK	26a	26b	SOLE1_DRVL
MB1_CW	27a	27b	VCC
MB1_M2	28a	28b	SOLB1_PDL
MB1_M1	29a	29b	SOLB1_DRVL
VCC	30a	30b	VCC

機種	5117	ユニット	−
名称	回路図	補助名称	DPR2
コード	Z22Y0005117	Rev.	4
		頁	5/19

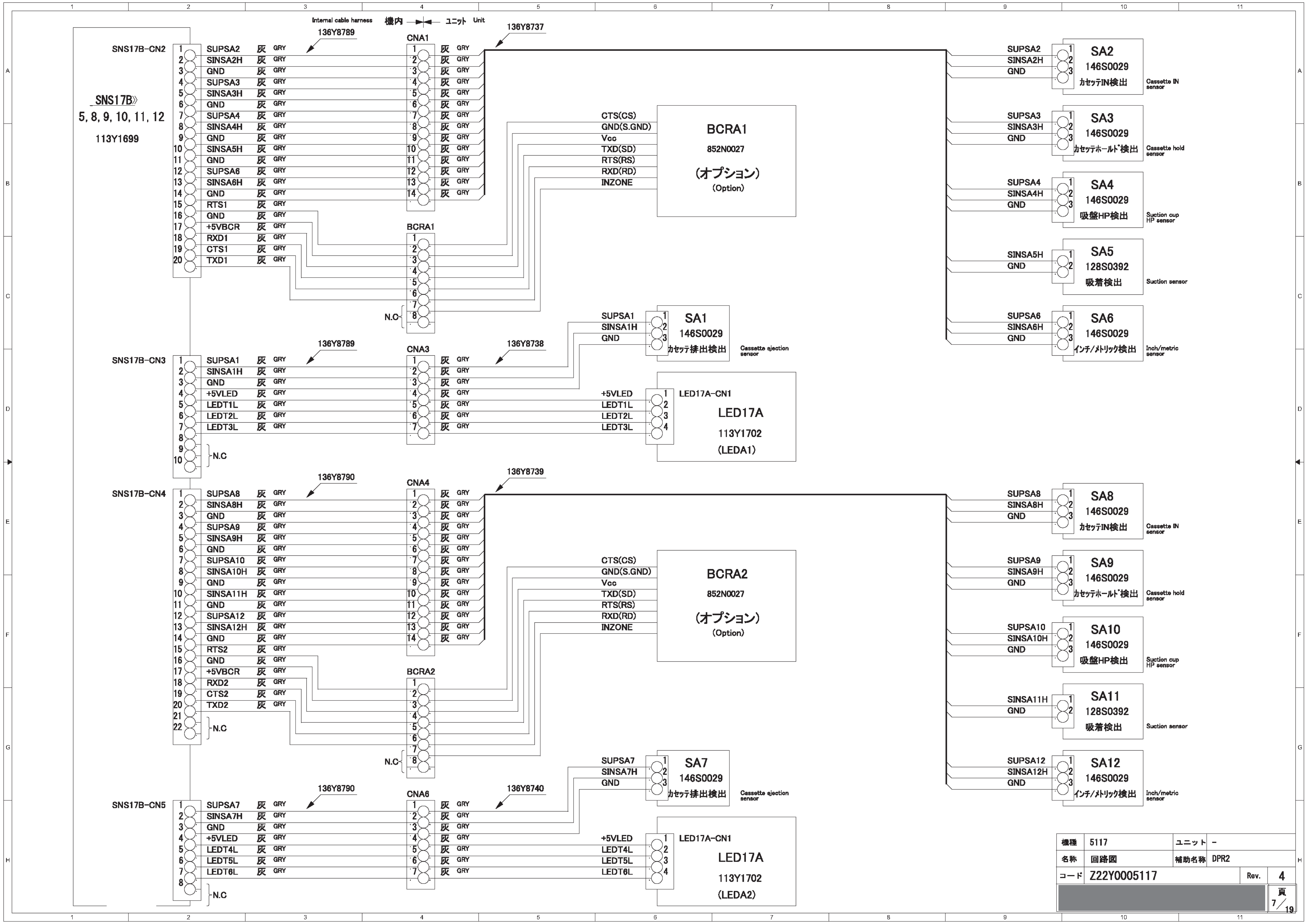
FR9H5D05.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


INV17A-CN3
L1-1 白 WHT
L1-2 白 WHT
L1-3 白 WHT
L1-4 白 WHT
120Y0091
LAMP1
123N0007
消去ランプ
Erasure lamp
INV17A》11
109N0020
INV17A-CN4
L2-1 白 WHT
L2-2 白 WHT
L2-3 白 WHT
L2-4 白 WHT
120Y0091
LAMP2
123N0007
消去ランプ
Erasure lamp
INV17A-CN5
L3-1 白 WHT
L3-2 白 WHT
L3-3 白 WHT
L3-4 白 WHT
120Y0091
LAMP3
123N0007
消去ランプ
Erasure lamp
INV17A-CN6
FAN_INV 赤 RED
GND_24VINV 黒 BLK
FANE2
119S0006
インバーター冷却
Inverter cooling fan
INV17A-CN7
FAN_LAMP 赤 RED
GND_24VINV 黒 BLK
FANE1
119S0008
消去冷却
Erasure unit cooling fan
INV17A-CN9
FAN_INV 赤 RED
GND_24FAN 黒 BLK
FANE3
119S0006
インバーター冷却
Inverter cooling fan
Internal cable harness 機内 ユニット Unit
2 INVpower
PSU17A-CN2
136Y8782
CNE41
ORN 橙
136Y8766
+24V_INV1
GND_24VINV
INV17A-CN1
INV17A-CN8
RL1H 橙 ORN
RL1L 橙 ORN
136Y8767
INV17B-CN6
+24V_INV1
GND_24VINV
INV17B-CN1
INV17B-CN3
L4-1 白 WHT
L4-2 白 WHT
L4-3 白 WHT
L4-4 白 WHT
120Y0091
LAMP4
123N0007
消去ランプ
Erasure lamp
INV17B》11
109N0021
INV17B-CN4
L5-1 白 WHT
L5-2 白 WHT
L5-3 白 WHT
L5-4 白 WHT
120Y0091
LAMP5
123N0007
消去ランプ
Erasure lamp
INV17B-CN5
TSW_H 橙 ORN
TSW_L 橙 ORN
136Y8768
TSWE1
TSWE1-1
TSWE1-2
NC
COM
115S0153
安全サーモ（ランプ）
Safety thermostat (lamp)
機種 5117
ユニット -
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 6/19

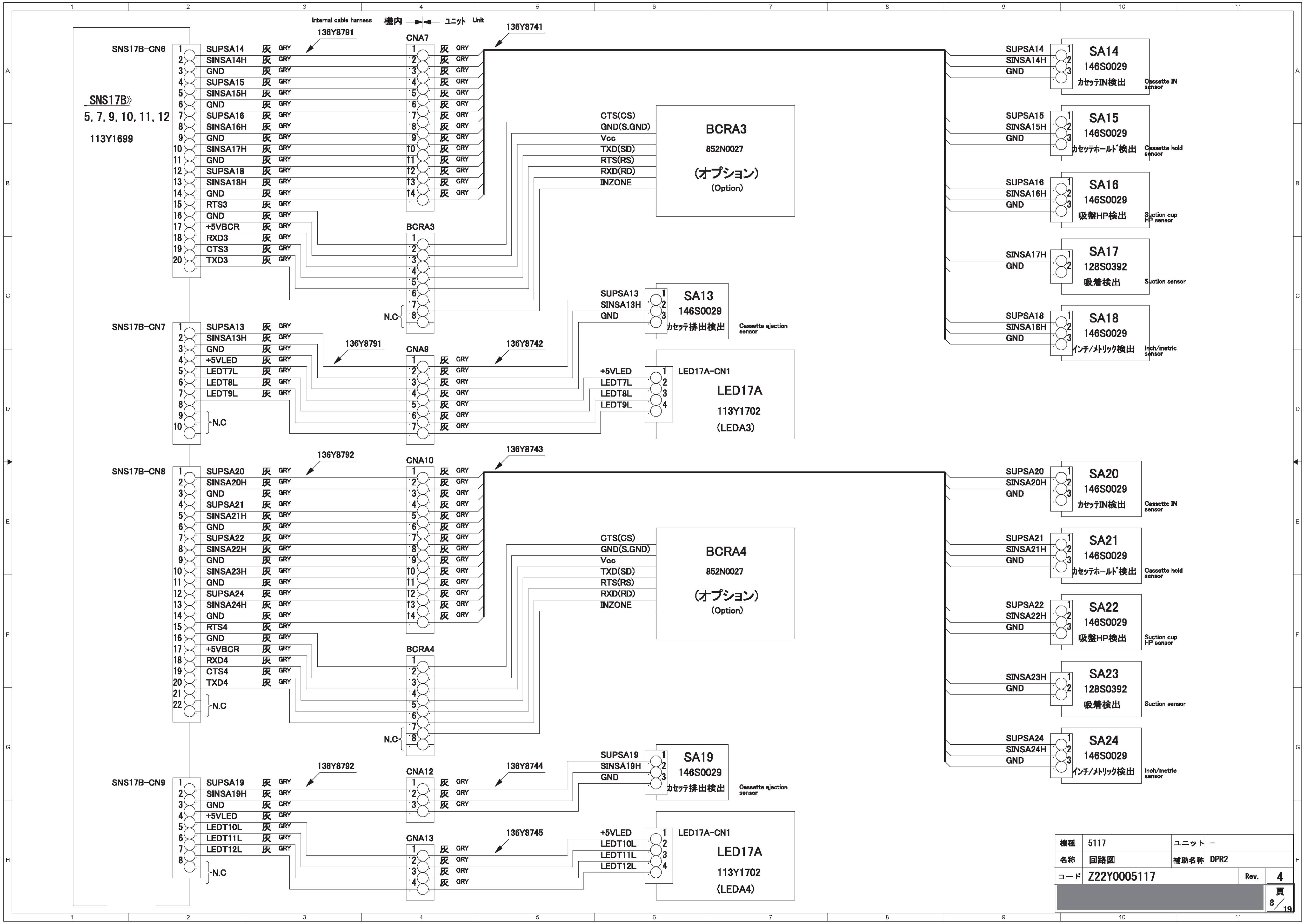
FR9H5D06.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness
機内
ユニット Unit
136Y8789
136Y8737
SNS17B-CN2
SNS17B》
5, 8, 9, 10, 11, 12
113Y1699
SUPSA2
SINSA2H
GND
SUPSA3
SINSA3H
GND
SUPSA4
SINSA4H
GND
SINSA5H
GND
SUPSA6
SINSA6H
GND
RTS1
GND
+5VBCR
RXD1
CTS1
TXD1
灰 GRY
CNA1
BCRA1
N.C
CTS(CS)
GND(S.GND)
Vcc
TXD(SD)
RTS(RS)
RXD(RD)
INZONE
BCRA1
852N0027
（オプション）
(Option)
SA2
146S0029
カセッテIN検出
Cassette IN sensor
SA3
146S0029
カセッテホールド検出
Cassette hold sensor
SA4
146S0029
吸盤HP検出
Suction cup HP sensor
SA5
128S0392
吸着検出
Suction sensor
SA6
146S0029
インチ/メトリック検出
Inch/metric sensor
SUPSA1
SINSA1H
GND
SA1
146S0029
カセッテ排出検出
Cassette ejection sensor
136Y8789
136Y8738
SNS17B-CN3
CNA3
SUPSA1
SINSA1H
GND
+5VLED
LEDT1L
LEDT2L
LEDT3L
N.C
+5VLED
LEDT1L
LEDT2L
LEDT3L
LED17A-CN1
LED17A
113Y1702
(LEDA1)
136Y8790
136Y8739
SNS17B-CN4
CNA4
SUPSA8
SINSA8H
GND
SUPSA9
SINSA9H
GND
SUPSA10
SINSA10H
GND
SINSA11H
GND
SUPSA12
SINSA12H
GND
RTS2
GND
+5VBCR
RXD2
CTS2
TXD2
N.C
BCRA2
N.C
CTS(CS)
GND(S.GND)
Vcc
TXD(SD)
RTS(RS)
RXD(RD)
INZONE
BCRA2
852N0027
（オプション）
(Option)
SA8
146S0029
カセッテIN検出
Cassette IN sensor
SA9
146S0029
カセッテホールド検出
Cassette hold sensor
SA10
146S0029
吸盤HP検出
Suction cup HP sensor
SA11
128S0392
吸着検出
Suction sensor
SA12
146S0029
インチ/メトリック検出
Inch/metric sensor
SUPSA7
SINSA7H
GND
SA7
146S0029
カセッテ排出検出
Cassette ejection sensor
136Y8790
136Y8740
SNS17B-CN5
CNA6
SUPSA7
SINSA7H
GND
+5VLED
LEDT4L
LEDT5L
LEDT6L
N.C
+5VLED
LEDT4L
LEDT5L
LEDT6L
LED17A-CN1
LED17A
113Y1702
(LEDA2)
機種 5117
ユニット -
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 7/19

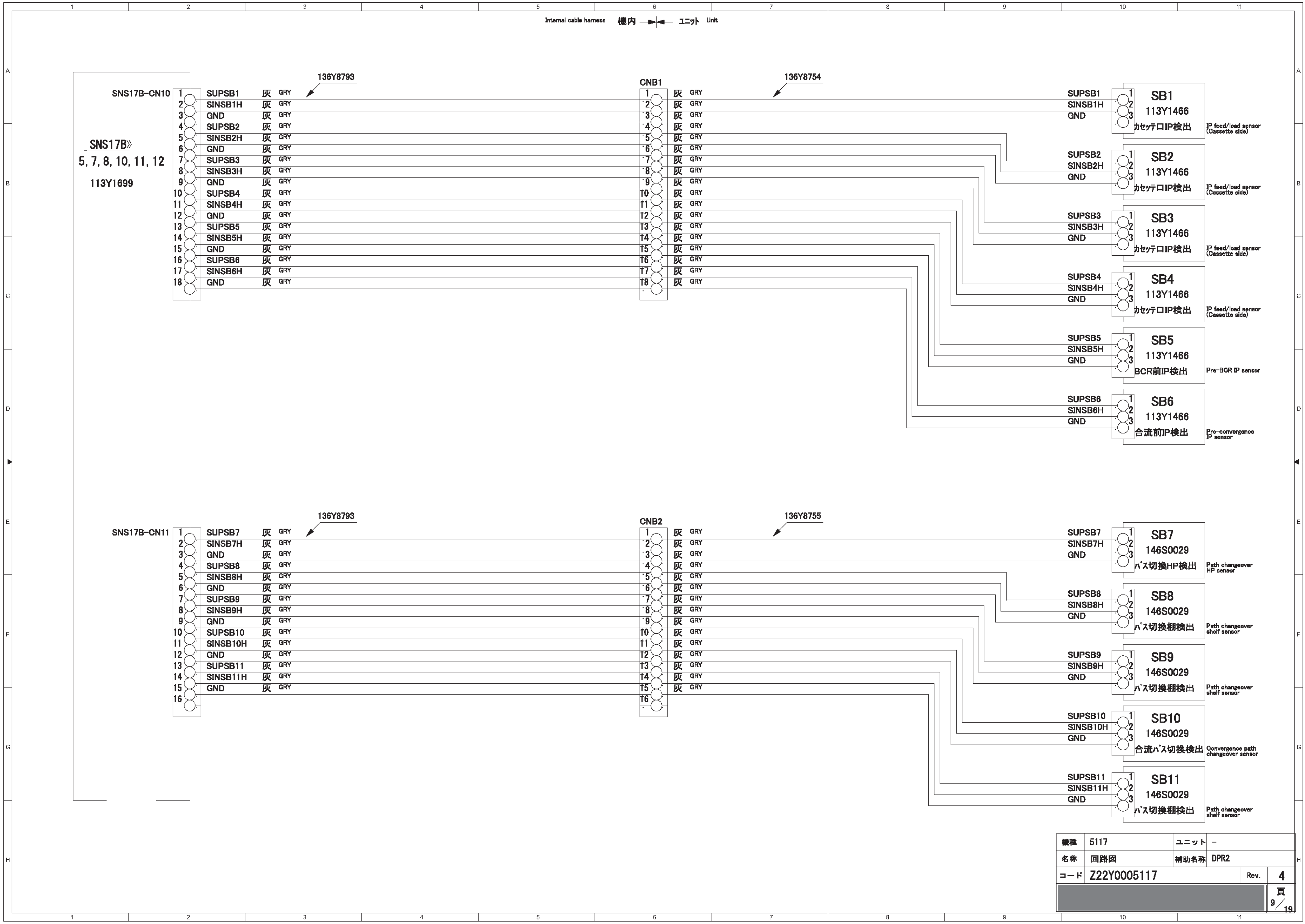
FR9H5D07.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)

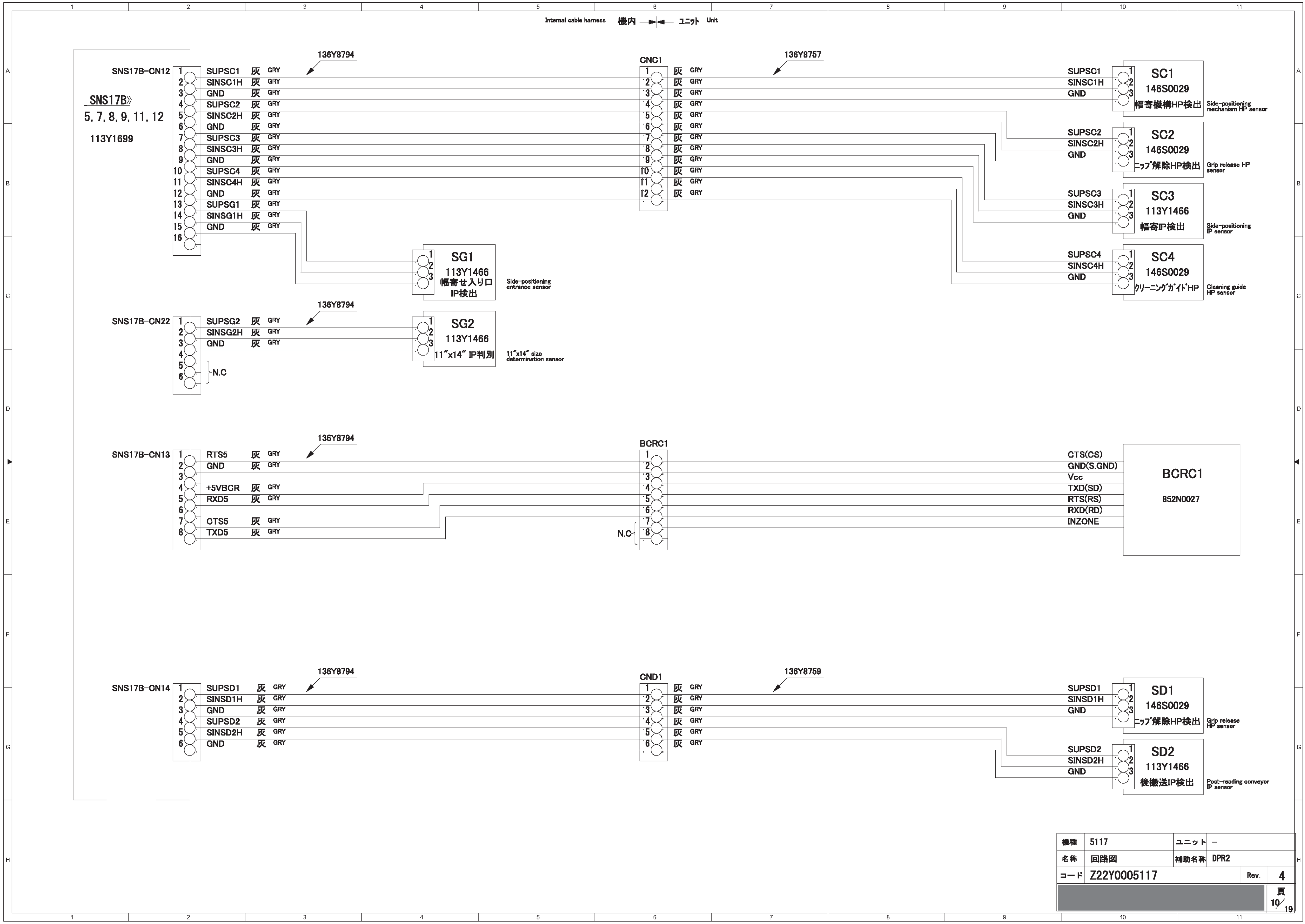

Internal cable harness
機内
ユニット Unit
136Y8791
136Y8741
136Y8742
136Y8743
136Y8744
136Y8745
136Y8792
SNS17B》
5, 7, 9, 10, 11, 12
113Y1699
SNS17B-CN6
SNS17B-CN7
SNS17B-CN8
SNS17B-CN9
SUPSA14
SINSA14H
GND
SUPSA15
SINSA15H
SUPSA16
SINSA16H
SINSA17H
SUPSA18
SINSA18H
RTS3
+5VBCR
RXD3
CTS3
TXD3
SUPSA13
SINSA13H
+5VLED
LEDT7L
LEDT8L
LEDT9L
N.C
SUPSA20
SINSA20H
SUPSA21
SINSA21H
SUPSA22
SINSA22H
SINSA23H
SUPSA24
SINSA24H
RTS4
RXD4
CTS4
TXD4
SUPSA19
SINSA19H
LEDT10L
LEDT11L
LEDT12L
灰 GRY
CNA7
BCRA3
CNA9
CNA10
BCRA4
CNA12
CNA13
CTS(CS)
GND(S.GND)
Vcc
TXD(SD)
RTS(RS)
RXD(RD)
INZONE
BCRA3
852N0027
(オプション)
(Option)
BCRA4
852N0027
(オプション)
(Option)
SA13
146S0029
カセッテ排出検出
Cassette ejection sensor
LED17A-CN1
LED17A
113Y1702
(LEDA3)
SA19
146S0029
カセッテ排出検出
Cassette ejection sensor
LED17A
113Y1702
(LEDA4)
SA14
146S0029
カセッテIN検出
Cassette IN sensor
SA15
146S0029
カセッテホールド検出
Cassette hold sensor
SA16
146S0029
吸盤HP検出
Suction cup HP sensor
SA17
128S0392
吸着検出
Suction sensor
SA18
146S0029
インチ/メトリック検出
Inch/metric sensor
SA20
146S0029
カセッテIN検出
Cassette IN sensor
SA21
146S0029
カセッテホールド検出
Cassette hold sensor
SA22
146S0029
吸盤HP検出
Suction cup HP sensor
SA23
128S0392
吸着検出
Suction sensor
SA24
146S0029
インチ/メトリック検出
Inch/metric sensor
機種 5117
ユニット －
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 8/19
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H

FR9H5D08.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)

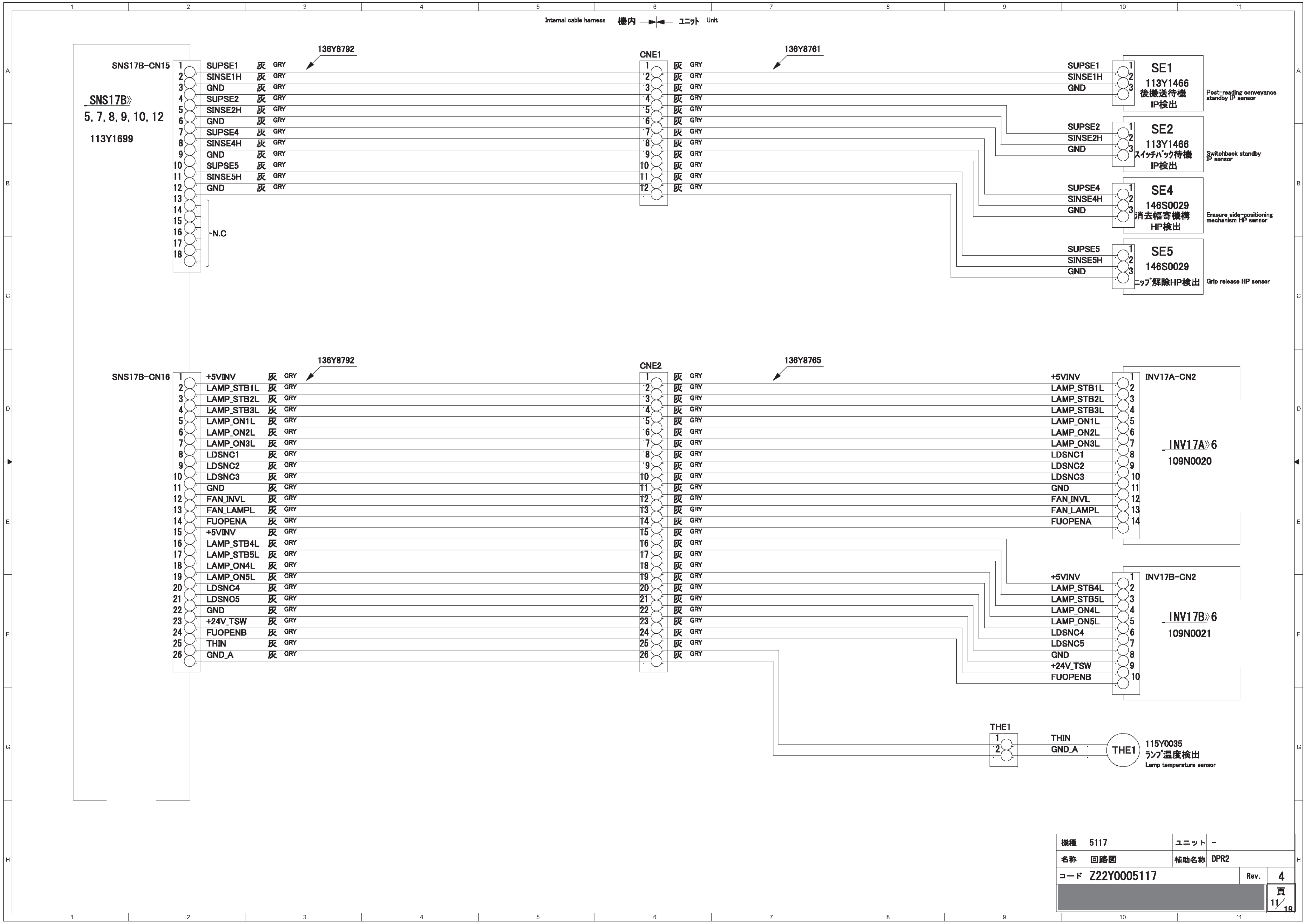

Internal cable harness 機内 ユニット Unit
SNS17B》
5, 7, 8, 10, 11, 12
113Y1699
SNS17B-CN10
136Y8793
CNB1
136Y8754
1 SUPSB1 灰 GRY
2 SINSB1H 灰 GRY
3 GND 灰 GRY
4 SUPSB2 灰 GRY
5 SINSB2H 灰 GRY
6 GND 灰 GRY
7 SUPSB3 灰 GRY
8 SINSB3H 灰 GRY
9 GND 灰 GRY
10 SUPSB4 灰 GRY
11 SINSB4H 灰 GRY
12 GND 灰 GRY
13 SUPSB5 灰 GRY
14 SINSB5H 灰 GRY
15 GND 灰 GRY
16 SUPSB6 灰 GRY
17 SINSB6H 灰 GRY
18 GND 灰 GRY
SB1 113Y1466 カセッテ口IP検出 IP feed/load sensor (Cassette side)
SB2 113Y1466 カセッテ口IP検出 IP feed/load sensor (Cassette side)
SB3 113Y1466 カセッテ口IP検出 IP feed/load sensor (Cassette side)
SB4 113Y1466 カセッテ口IP検出 IP feed/load sensor (Cassette side)
SB5 113Y1466 BCR前IP検出 Pre-BCR IP sensor
SB6 113Y1466 合流前IP検出 Pre-convergence IP sensor
SNS17B-CN11
136Y8793
CNB2
136Y8755
1 SUPSB7 灰 GRY
2 SINSB7H 灰 GRY
3 GND 灰 GRY
4 SUPSB8 灰 GRY
5 SINSB8H 灰 GRY
6 GND 灰 GRY
7 SUPSB9 灰 GRY
8 SINSB9H 灰 GRY
9 GND 灰 GRY
10 SUPSB10 灰 GRY
11 SINSB10H 灰 GRY
12 GND 灰 GRY
13 SUPSB11 灰 GRY
14 SINSB11H 灰 GRY
15 GND 灰 GRY
16
SB7 146S0029 パス切換HP検出 Path changeover HP sensor
SB8 146S0029 パス切換棚検出 Path changeover shelf sensor
SB9 146S0029 パス切換棚検出 Path changeover shelf sensor
SB10 146S0029 合流パス切換検出 Convergence path changeover sensor
SB11 146S0029 パス切換棚検出 Path changeover shelf sensor
機種 5117
ユニット –
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 9/19
FR9H5D09.EPS

13A 回路図 1（#20001 以降） CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness 機内 ユニット Unit
SNS17B》
5, 7, 8, 9, 11, 12
113Y1699
SNS17B-CN12
SUPSC1 灰 GRY
SINSC1H 灰 GRY
GND 灰 GRY
SUPSC2 灰 GRY
SINSC2H 灰 GRY
GND 灰 GRY
SUPSC3 灰 GRY
SINSC3H 灰 GRY
GND 灰 GRY
SUPSC4 灰 GRY
SINSC4H 灰 GRY
GND 灰 GRY
SUPSG1 灰 GRY
SINSG1H 灰 GRY
GND 灰 GRY
136Y8794
CNC1
136Y8757
SC1 146S0029 幅寄機構HP検出 Side-positioning mechanism HP sensor
SC2 146S0029 ニップ解除HP検出 Grip release HP sensor
SC3 113Y1466 幅寄IP検出 Side-positioning IP sensor
SC4 146S0029 クリーニングガイドHP Cleaning guide HP sensor
SG1 113Y1466 幅寄せ入り口IP検出 Side-positioning entrance sensor
SNS17B-CN22
SUPSG2 灰 GRY
SINSG2H 灰 GRY
GND 灰 GRY
N.C
SG2 113Y1466 11″x14″ IP判別 11″x14″ size determination sensor
SNS17B-CN13
RTS5 灰 GRY
GND 灰 GRY
+5VBCR 灰 GRY
RXD5 灰 GRY
CTS5 灰 GRY
TXD5 灰 GRY
BCRC1
N.C
CTS(CS)
GND(S.GND)
Vcc
TXD(SD)
RTS(RS)
RXD(RD)
INZONE
BCRC1 852N0027
SNS17B-CN14
SUPSD1 灰 GRY
SINSD1H 灰 GRY
GND 灰 GRY
SUPSD2 灰 GRY
SINSD2H 灰 GRY
GND 灰 GRY
CND1
136Y8759
SD1 146S0029 ニップ解除HP検出 Grip release HP sensor
SD2 113Y1466 後搬送IP検出 Post-reading conveyor IP sensor
機種 5117
ユニット –
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 10/19

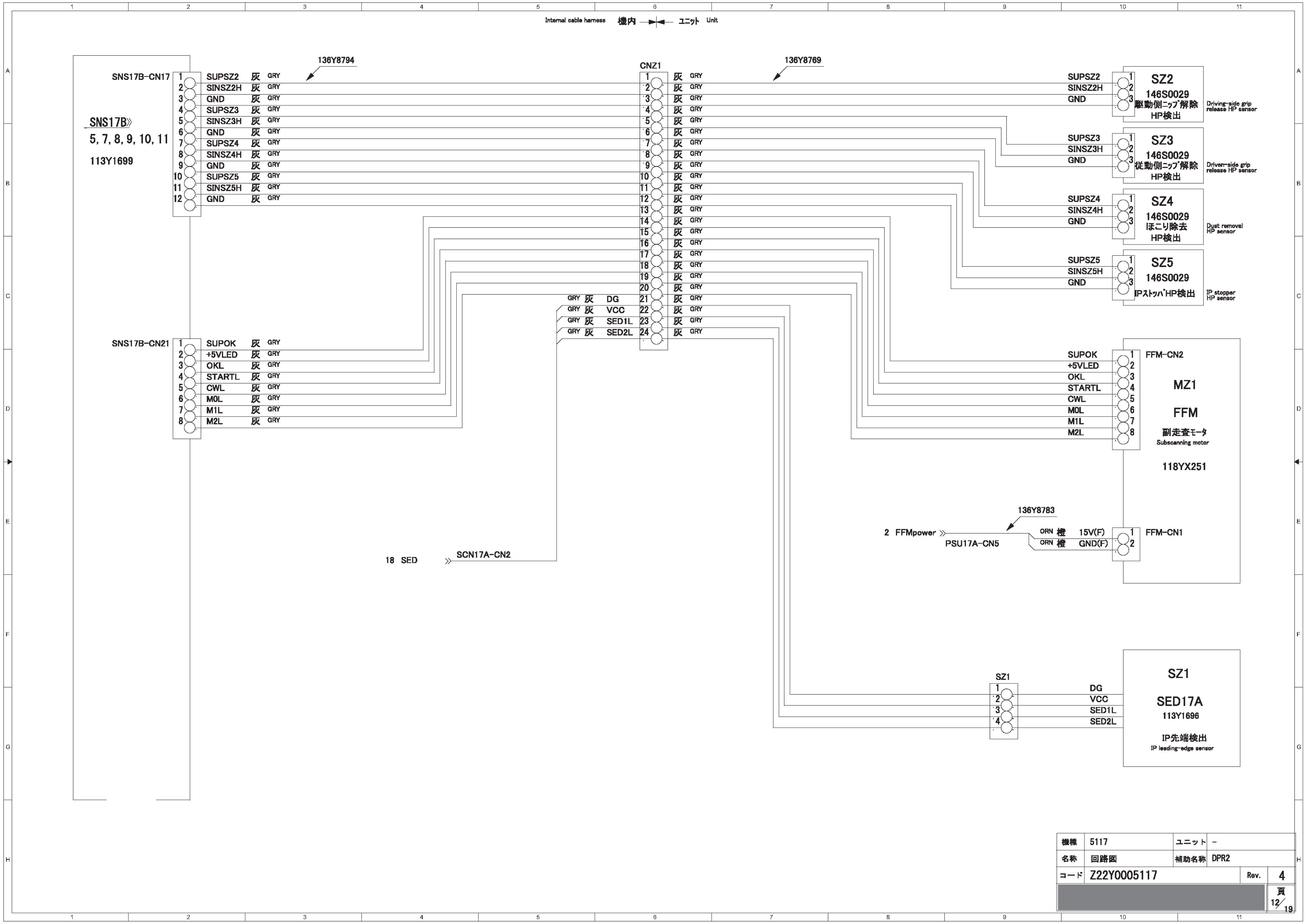
FR9H5D10.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness 機内 ユニット Unit
SNS17B-CN15
SNS17B》 5, 7, 8, 9, 10, 12
113Y1699
136Y8792
CNE1
136Y8761
SUPSE1
SINSE1H
GND
SUPSE2
SINSE2H
GND
SUPSE4
SINSE4H
GND
SUPSE5
SINSE5H
GND
灰 GRY
N.C
SE1
113Y1466
後搬送待機 IP検出
Post-reading conveyance standby IP sensor
SE2
113Y1466
ｽｲｯﾁﾊﾞｯｸ待機 IP検出
Switchback standby IP sensor
SE4
146S0029
消去幅寄機構 HP検出
Erasure side-positioning mechanism HP sensor
SE5
146S0029
ﾆｯﾌﾟ解除HP検出
Grip release HP sensor
SNS17B-CN16
CNE2
136Y8765
+5VINV
LAMP_STB1L
LAMP_STB2L
LAMP_STB3L
LAMP_ON1L
LAMP_ON2L
LAMP_ON3L
LDSNC1
LDSNC2
LDSNC3
GND
FAN_INVL
FAN_LAMPL
FUOPENA
+5VINV
LAMP_STB4L
LAMP_STB5L
LAMP_ON4L
LAMP_ON5L
LDSNC4
LDSNC5
GND
+24V_TSW
FUOPENB
THIN
GND_A
INV17A-CN2
INV17A》6
109N0020
INV17B-CN2
INV17B》6
109N0021
THE1
115Y0035
ﾗﾝﾌﾟ温度検出
Lamp temperature sensor
機種 5117
ユニット -
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 11/19

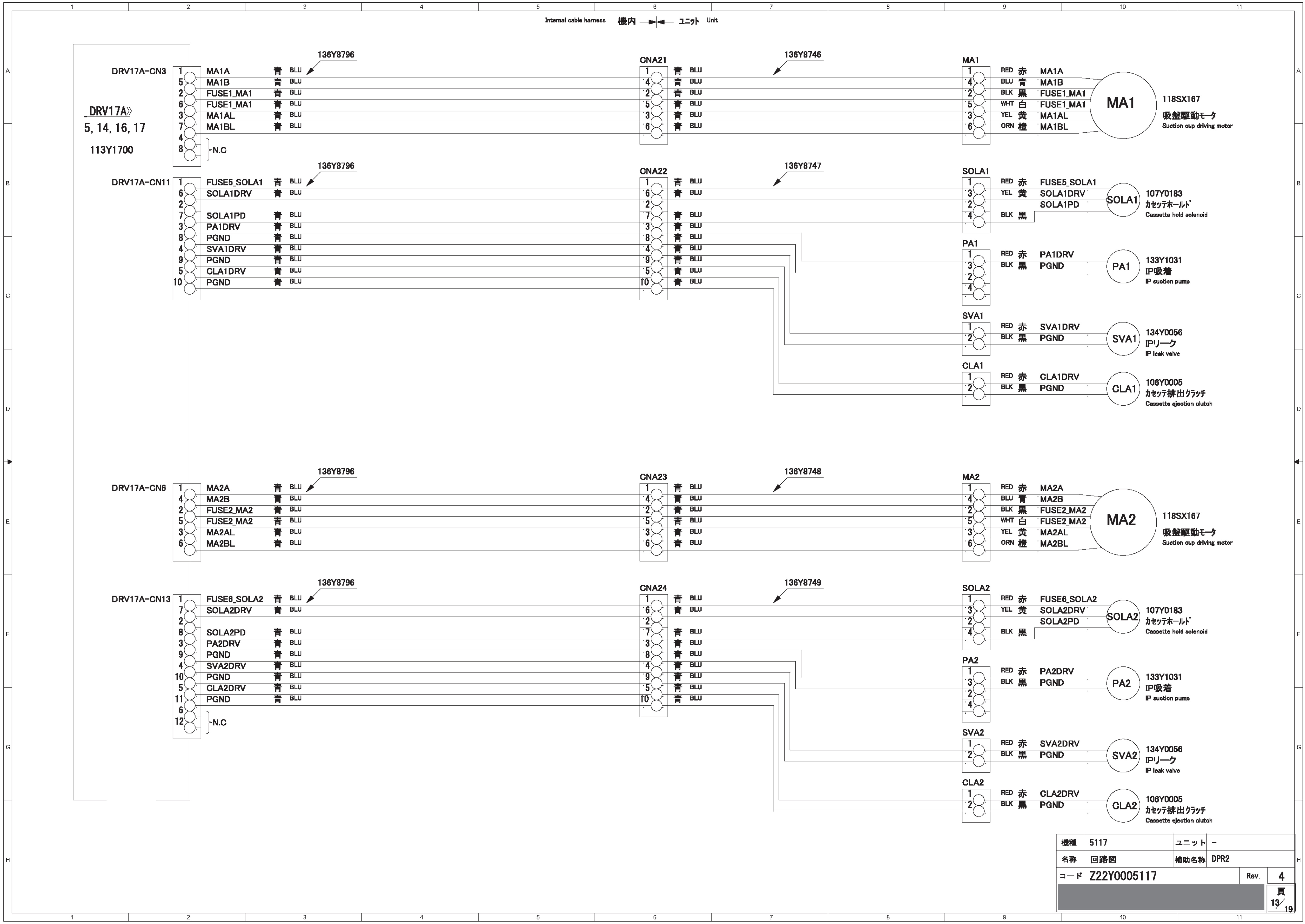
FR9H5D11.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness 機内 ユニット Unit
136Y8794
136Y8769
CNZ1
SNS17B-CN17
SNS17B》
5, 7, 8, 9, 10, 11
113Y1699
1 SUPSZ2 灰 GRY
2 SINSZ2H 灰 GRY
3 GND 灰 GRY
4 SUPSZ3 灰 GRY
5 SINSZ3H 灰 GRY
6 GND 灰 GRY
7 SUPSZ4 灰 GRY
8 SINSZ4H 灰 GRY
9 GND 灰 GRY
10 SUPSZ5 灰 GRY
11 SINSZ5H 灰 GRY
12 GND 灰 GRY
SNS17B-CN21
1 SUPOK 灰 GRY
2 +5VLED 灰 GRY
3 OKL 灰 GRY
4 STARTL 灰 GRY
5 CWL 灰 GRY
6 M0L 灰 GRY
7 M1L 灰 GRY
8 M2L 灰 GRY
GRY 灰 DG 21
GRY 灰 VCC 22
GRY 灰 SED1L 23
GRY 灰 SED2L 24
SZ2 146S0029 駆動側ニップ解除 HP検出
Driving-side grip release HP sensor
SZ3 146S0029 従動側ニップ解除 HP検出
Driven-side grip release HP sensor
SZ4 146S0029 ほこり除去 HP検出
Dust removal HP sensor
SZ5 146S0029 IPストッパHP検出
IP stopper HP sensor
FFM-CN2
MZ1
FFM
副走査モータ
Subscanning motor
118YX251
136Y8783
2 FFMpower》
PSU17A-CN5
ORN 橙 15V(F)
ORN 橙 GND(F)
FFM-CN1
18 SED
》SCN17A-CN2
SZ1
1 DG
2 VCC
3 SED1L
4 SED2L
SZ1
SED17A
113Y1696
IP先端検出
IP leading-edge sensor
機種 5117
ユニット －
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
[redacted]
頁 12/19

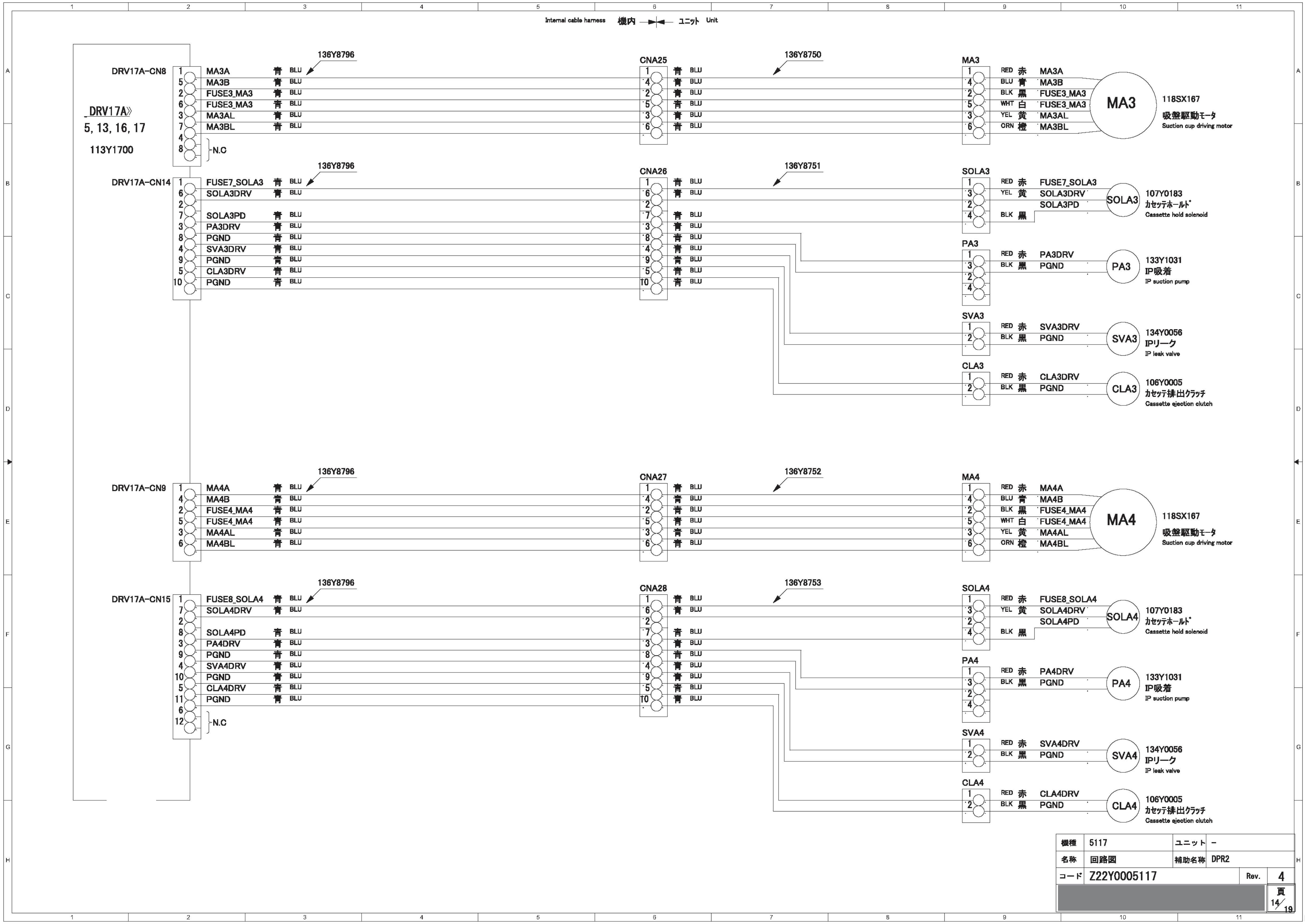
FR9H5D12.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness 機内 ユニット Unit
DRV17A》
5, 14, 16, 17
113Y1700
DRV17A-CN3
MA1A
MA1B
FUSE1_MA1
FUSE1_MA1
MA1AL
MA1BL
N.C
136Y8796
青 BLU
CNA21
136Y8746
MA1
RED 赤
BLU 青
BLK 黒
WHT 白
YEL 黄
ORN 橙
MA1
118SX167
吸盤駆動モータ
Suction cup driving motor
DRV17A-CN11
FUSE5_SOLA1
SOLA1DRV
SOLA1PD
PA1DRV
PGND
SVA1DRV
PGND
CLA1DRV
PGND
CNA22
136Y8747
SOLA1
107Y0183
カセッテホールド
Cassette hold solenoid
PA1
133Y1031
IP吸着
IP suction pump
SVA1
134Y0056
IPリーク
IP leak valve
CLA1
106Y0005
カセッテ排出クラッチ
Cassette ejection clutch
DRV17A-CN6
MA2A
MA2B
FUSE2_MA2
FUSE2_MA2
MA2AL
MA2BL
CNA23
136Y8748
MA2
118SX167
吸盤駆動モータ
Suction cup driving motor
DRV17A-CN13
FUSE6_SOLA2
SOLA2DRV
SOLA2PD
PA2DRV
PGND
SVA2DRV
PGND
CLA2DRV
PGND
N.C
CNA24
136Y8749
SOLA2
107Y0183
カセッテホールド
Cassette hold solenoid
PA2
133Y1031
IP吸着
IP suction pump
SVA2
134Y0056
IPリーク
IP leak valve
CLA2
106Y0005
カセッテ排出クラッチ
Cassette ejection clutch
機種 5117
ユニット －
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 13/19
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H

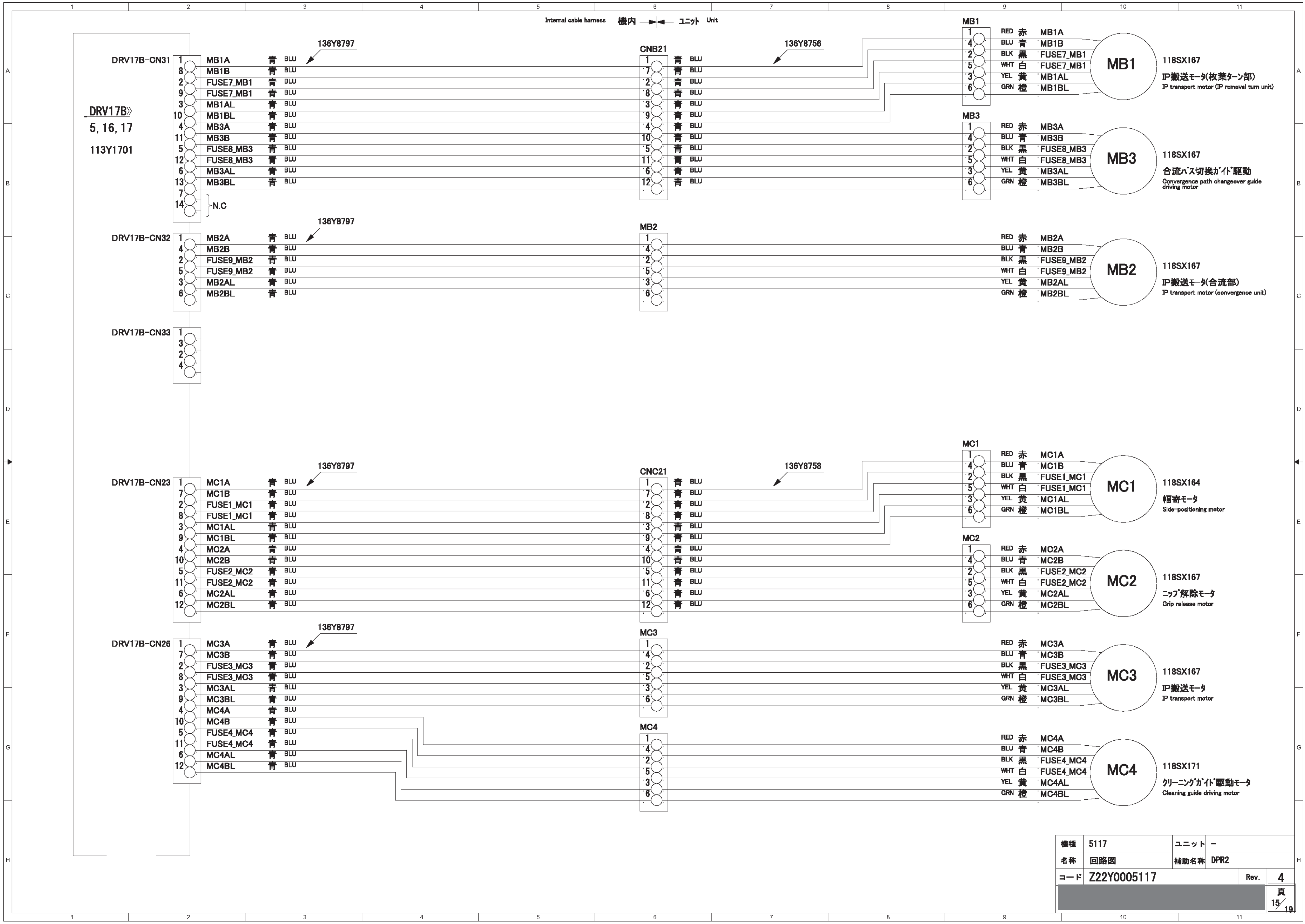
FR9H5D13.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness 機内 ユニット Unit
DRV17A
5, 13, 16, 17
113Y1700
DRV17A-CN8
MA3A
MA3B
FUSE3_MA3
FUSE3_MA3
MA3AL
MA3BL
N.C
136Y8796
CNA25
136Y8750
MA3
RED 赤
BLU 青
BLK 黒
WHT 白
YEL 黄
ORN 橙
118SX167
吸盤駆動モータ
Suction cup driving motor
DRV17A-CN14
FUSE7_SOLA3
SOLA3DRV
SOLA3PD
PA3DRV
PGND
SVA3DRV
CLA3DRV
CNA26
136Y8751
SOLA3
107Y0183
カセッテホールド
Cassette hold solenoid
PA3
133Y1031
IP吸着
IP suction pump
SVA3
134Y0056
IPリーク
IP leak valve
CLA3
106Y0005
カセッテ排出クラッチ
Cassette ejection clutch
DRV17A-CN9
MA4A
MA4B
FUSE4_MA4
MA4AL
MA4BL
CNA27
136Y8752
MA4
DRV17A-CN15
FUSE8_SOLA4
SOLA4DRV
SOLA4PD
PA4DRV
SVA4DRV
CLA4DRV
CNA28
136Y8753
SOLA4
PA4
SVA4
CLA4
機種 5117
ユニット －
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 14/19

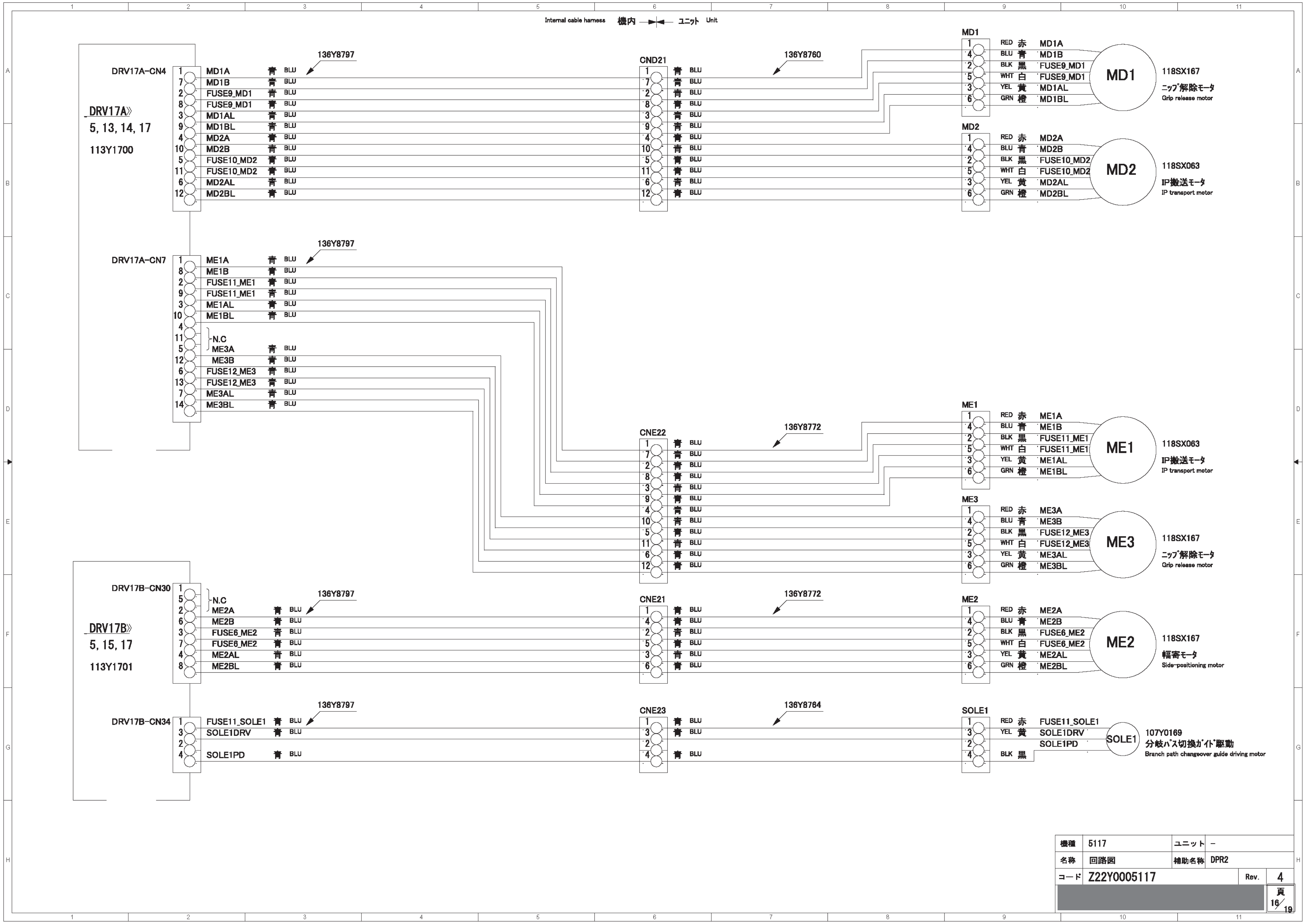
FR9H5D14.EPS

13A 回路図 1（#20001 以降） CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness
機内 ユニット Unit
DRV17B》
5, 16, 17
113Y1701
DRV17B-CN31
DRV17B-CN32
DRV17B-CN33
DRV17B-CN23
DRV17B-CN26
136Y8797
136Y8756
136Y8758
CNB21
CNC21
MB2
MC3
MC4
N.C
青 BLU
MB1A
MB1B
FUSE7_MB1
MB1AL
MB1BL
MB3A
MB3B
FUSE8_MB3
MB3AL
MB3BL
MB2A
MB2B
FUSE9_MB2
MB2AL
MB2BL
MC1A
MC1B
FUSE1_MC1
MC1AL
MC1BL
MC2A
MC2B
FUSE2_MC2
MC2AL
MC2BL
MC3A
MC3B
FUSE3_MC3
MC3AL
MC3BL
MC4A
MC4B
FUSE4_MC4
MC4AL
MC4BL
RED 赤
BLU 青
BLK 黒
WHT 白
YEL 黄
GRN 橙
MB1
118SX167
IP搬送モータ(枚葉ターン部)
IP transport motor (IP removal turn unit)
MB3
118SX167
合流パス切換ガイド駆動
Convergence path changeover guide driving motor
MB2
118SX167
IP搬送モータ(合流部)
IP transport motor (convergence unit)
MC1
118SX164
幅寄モータ
Side-positioning motor
MC2
118SX167
ニップ解除モータ
Grip release motor
MC3
118SX167
IP搬送モータ
IP transport motor
MC4
118SX171
クリーニングガイド駆動モータ
Cleaning guide driving motor
機種 5117
ユニット –
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 15/19

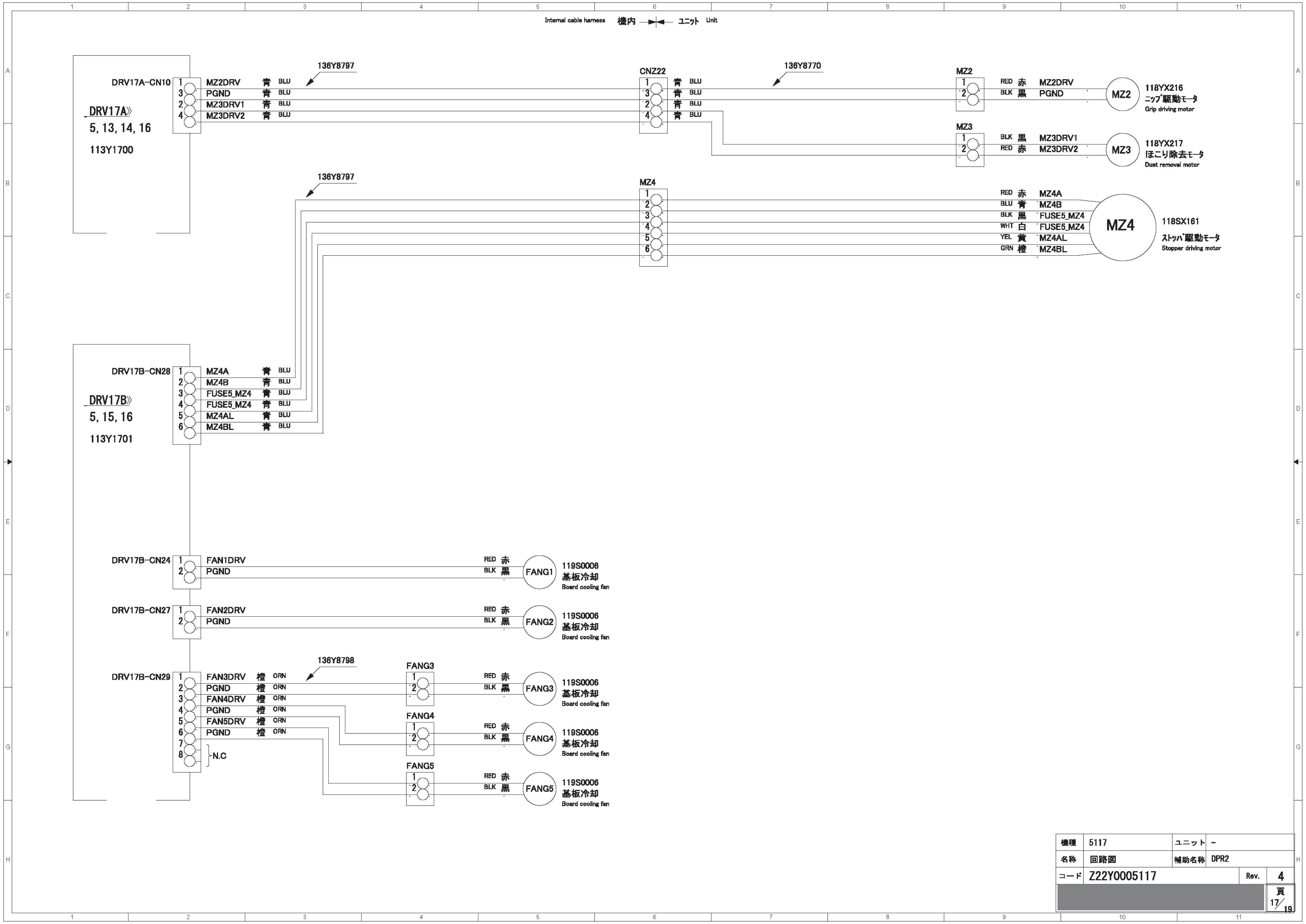
FR9H5D15.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness 機内 ユニット Unit
DRV17A-CN4
DRV17A》
5, 13, 14, 17
113Y1700
MD1A
MD1B
FUSE9_MD1
FUSE9_MD1
MD1AL
MD1BL
MD2A
MD2B
FUSE10_MD2
FUSE10_MD2
MD2AL
MD2BL
青 BLU
136Y8797
CND21
136Y8760
MD1
RED 赤
BLU 青
BLK 黒
WHT 白
YEL 黄
GRN 橙
118SX167
ニップ解除モータ
Grip release motor
MD2
118SX063
IP搬送モータ
IP transport motor
DRV17A-CN7
ME1A
ME1B
FUSE11_ME1
FUSE11_ME1
ME1AL
ME1BL
N.C
ME3A
ME3B
FUSE12_ME3
FUSE12_ME3
ME3AL
ME3BL
CNE22
136Y8772
ME1
118SX063
IP搬送モータ
IP transport motor
ME3
118SX167
ニップ解除モータ
Grip release motor
DRV17B-CN30
DRV17B》
5, 15, 17
113Y1701
ME2A
ME2B
FUSE6_ME2
FUSE6_ME2
ME2AL
ME2BL
CNE21
ME2
118SX167
幅寄モータ
Side-positioning motor
DRV17B-CN34
FUSE11_SOLE1
SOLE1DRV
SOLE1PD
CNE23
136Y8764
SOLE1
107Y0169
分岐パス切換ガイド駆動
Branch path changeover guide driving motor
機種 5117
ユニット −
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 16/19
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H

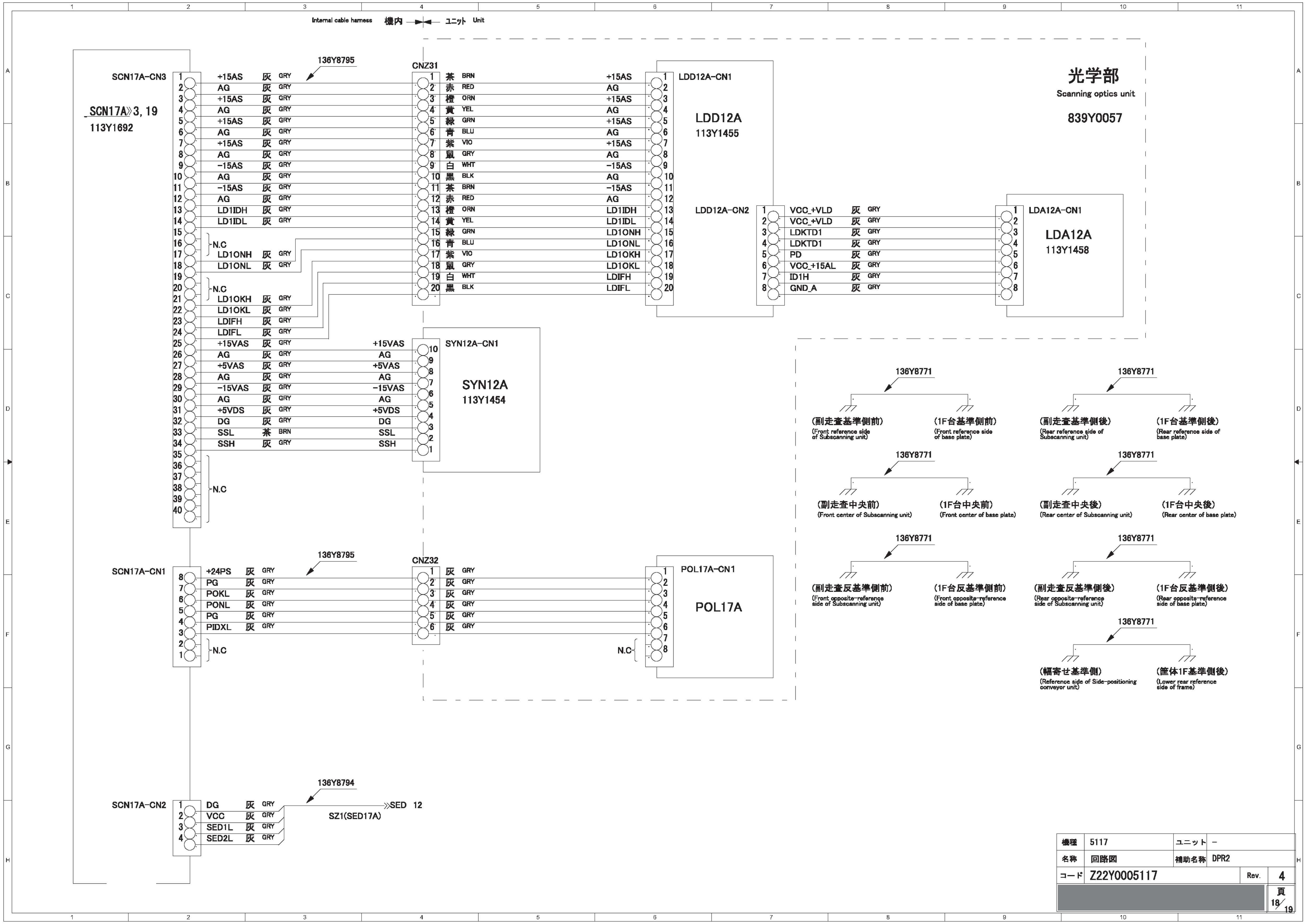
FR9H5D16.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)

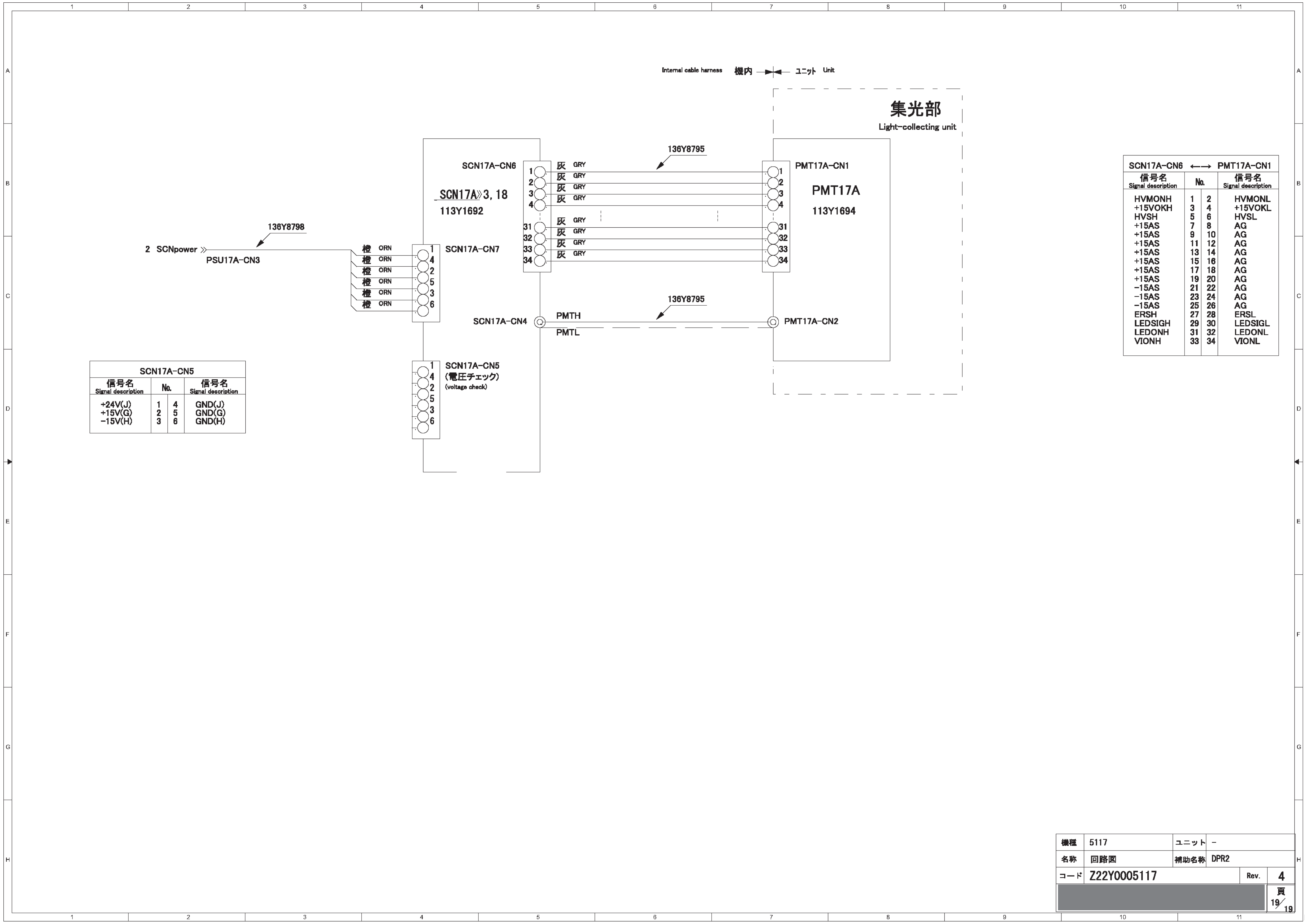

Internal cable harness 機内 ユニット Unit
DRV17A-CN10
DRV17A》
5, 13, 14, 16
113Y1700
1 MZ2DRV 青 BLU
3 PGND 青 BLU
2 MZ3DRV1 青 BLU
4 MZ3DRV2 青 BLU
136Y8797
CNZ22
136Y8770
MZ2
RED 赤 MZ2DRV
BLK 黒 PGND
MZ2
118YX216
ニップ駆動モータ
Grip driving motor
MZ3
BLK 黒 MZ3DRV1
RED 赤 MZ3DRV2
MZ3
118YX217
ほこり除去モータ
Dust removal motor
136Y8797
MZ4
RED 赤 MZ4A
BLU 青 MZ4B
BLK 黒 FUSE5_MZ4
WHT 白 FUSE5_MZ4
YEL 黄 MZ4AL
GRN 橙 MZ4BL
MZ4
118SX161
ストッパ駆動モータ
Stopper driving motor
DRV17B-CN28
DRV17B》
5, 15, 16
113Y1701
1 MZ4A 青 BLU
2 MZ4B 青 BLU
3 FUSE5_MZ4 青 BLU
4 FUSE5_MZ4 青 BLU
5 MZ4AL 青 BLU
6 MZ4BL 青 BLU
DRV17B-CN24
1 FAN1DRV
2 PGND
RED 赤
BLK 黒
FANG1
119S0006
基板冷却
Board cooling fan
DRV17B-CN27
1 FAN2DRV
2 PGND
RED 赤
BLK 黒
FANG2
119S0006
基板冷却
Board cooling fan
DRV17B-CN29
1 FAN3DRV 橙 ORN
2 PGND 橙 ORN
3 FAN4DRV 橙 ORN
4 PGND 橙 ORN
5 FAN5DRV 橙 ORN
6 PGND 橙 ORN
7
8 N.C
136Y8798
FANG3
RED 赤
BLK 黒
FANG3
119S0006
基板冷却
Board cooling fan
FANG4
RED 赤
BLK 黒
FANG4
119S0006
基板冷却
Board cooling fan
FANG5
RED 赤
BLK 黒
FANG5
119S0006
基板冷却
Board cooling fan
機種 5117
ユニット -
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 17/19

FR9H5D17.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness 機内 ユニット Unit
光学部
Scanning optics unit
839Y0057
SCN17A-CN3
SCN17A》3, 19
113Y1692
136Y8795
CNZ31
+15AS 灰 GRY
AG 灰 GRY
-15AS 灰 GRY
LD1IDH
LD1IDL
LD1ONH
LD1ONL
LD1OKH
LD1OKL
LDIFH
LDIFL
N.C
茶 BRN
赤 RED
橙 ORN
黄 YEL
緑 GRN
青 BLU
紫 VIO
鼠 GRY
白 WHT
黒 BLK
LDD12A-CN1
LDD12A
113Y1455
LDD12A-CN2
VCC_+VLD
LDKTD1
PD
VCC_+15AL
ID1H
GND_A
LDA12A-CN1
LDA12A
113Y1458
+15VAS
+5VAS
-15VAS
+5VDS
DG
SSL
SSH
SYN12A-CN1
SYN12A
113Y1454
136Y8771
（副走査基準側前）
(Front reference side of Subscanning unit)
（1F台基準側前）
(Front reference side of base plate)
（副走査基準側後）
(Rear reference side of Subscanning unit)
（1F台基準側後）
(Rear reference side of base plate)
（副走査中央前）
(Front center of Subscanning unit)
（1F台中央前）
(Front center of base plate)
（副走査中央後）
(Rear center of Subscanning unit)
（1F台中央後）
(Rear center of base plate)
（副走査反基準側前）
(Front opposite-reference side of Subscanning unit)
（1F台反基準側前）
(Front opposite-reference side of base plate)
（副走査反基準側後）
(Rear opposite-reference side of Subscanning unit)
（1F台反基準側後）
(Rear opposite-reference side of base plate)
（幅寄せ基準側）
(Reference side of Side-positioning conveyor unit)
（筐体1F基準側後）
(Lower rear reference side of frame)
SCN17A-CN1
CNZ32
+24PS
PG
POKL
PONL
PIDXL
POL17A-CN1
POL17A
SCN17A-CN2
136Y8794
VCC
SED1L
SED2L
》SED 12
SZ1(SED17A)
機種 5117
ユニット －
名称 回路図
補助名称 DPR2
コード Z22Y0005117
Rev. 4
頁 18/19
FR9H5D18.EPS

13A 回路図 1（#20001 以降）
CIRCUIT DIAGRAM 1 (#20001 or Later)


Internal cable harness 機内
ユニット Unit
集光部
Light-collecting unit
SCN17A-CN6
SCN17A》3, 18
113Y1692
136Y8795
灰 GRY
PMT17A-CN1
PMT17A
113Y1694
1
2
3
4
31
32
33
34
136Y8798
2 SCNpower 》
PSU17A-CN3
橙 ORN
SCN17A-CN7
1
4
2
5
3
6
136Y8795
SCN17A-CN4
PMTH
PMTL
PMT17A-CN2
SCN17A-CN5
(電圧チェック)
(voltage check)

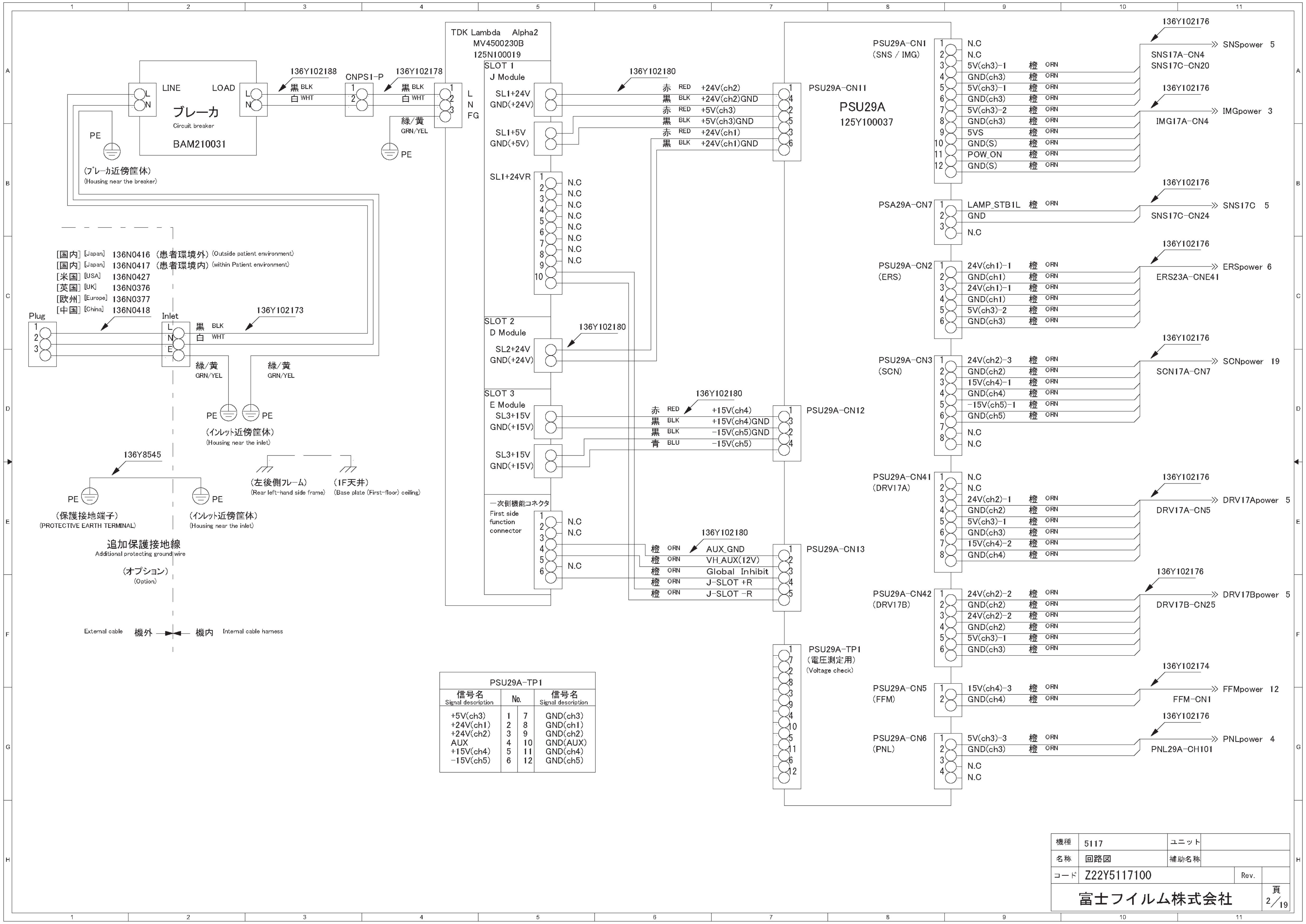
SCN17A-CN5			
信号名 Signal description	No.		信号名 Signal description
+24V(J)	1	4	GND(J)
+15V(G)	2	5	GND(G)
−15V(H)	3	6	GND(H)

SCN17A-CN6 ←→ PMT17A-CN1			
信号名 Signal description	No.		信号名 Signal description
HVMONH	1	2	HVMONL
+15VOKH	3	4	+15VOKL
HVSH	5	6	HVSL
+15AS	7	8	AG
+15AS	9	10	AG
+15AS	11	12	AG
+15AS	13	14	AG
+15AS	15	16	AG
+15AS	17	18	AG
+15AS	19	20	AG
−15AS	21	22	AG
−15AS	23	24	AG
−15AS	25	26	AG
ERSH	27	28	ERSL
LEDSIGH	29	30	LEDSIGL
LEDONH	31	32	LEDONL
VIONH	33	34	VIONL

機種	5117	ユニット	−
名称	回路図	補助名称	DPR2
コード	Z22Y0005117	Rev.	4
[redacted]			頁 19/19

FR9H5D19.EPS

13B 回路図 2（#50001 以降） CIRCUIT DIAGRAM 2 (#50001 or Later)


TDK Lambda Alpha2
MV4500230B
125N100019
SLOT 1
J Module
SL1+24V
GND(+24V)
SL1+5V
GND(+5V)
SL1+24VR
N.C
SLOT 2
D Module
SL2+24V
GND(+24V)
SLOT 3
E Module
SL3+15V
GND(+15V)
一次側機能コネクタ
First side function connector
LINE
LOAD
ブレーカ
Circuit breaker
BAM210031
PE
（ブレーカ近傍筐体）
(Housing near the breaker)
CNPS1-P
136Y102188
136Y102178
黒 BLK
白 WHT
緑/黄 GRN/YEL
L
N
FG
[国内] [Japan] 136N0416（患者環境外）(Outside patient environment)
[国内] [Japan] 136N0417（患者環境内）(within Patient environment)
[米国] [USA] 136N0427
[英国] [UK] 136N0376
[欧州] [Europe] 136N0377
[中国] [China] 136N0418
Plug
Inlet
136Y102173
（インレット近傍筐体）
(Housing near the inlet)
136Y8545
（左後側フレーム）
(Rear left-hand side frame)
（1F天井）
(Base plate (First-floor) ceiling)
（保護接地端子）
(PROTECTIVE EARTH TERMINAL)
追加保護接地線
Additional protecting ground wire
（オプション）
(Option)
External cable 機外 機内 Internal cable harness
136Y102180
赤 RED +24V(ch2)
黒 BLK +24V(ch2)GND
赤 RED +5V(ch3)
黒 BLK +5V(ch3)GND
赤 RED +24V(ch1)
黒 BLK +24V(ch1)GND
PSU29A-CN11
PSU29A
125Y100037
赤 RED +15V(ch4)
黒 BLK +15V(ch4)GND
黒 BLK -15V(ch5)GND
青 BLU -15V(ch5)
PSU29A-CN12
橙 ORN AUX_GND
橙 ORN VH_AUX(12V)
橙 ORN Global Inhibit
橙 ORN J-SLOT +R
橙 ORN J-SLOT -R
PSU29A-CN13
PSU29A-TP1
（電圧測定用）
(Voltage check)
PSU29A-CN1 (SNS / IMG)
N.C
5V(ch3)-1
GND(ch3)
5V(ch3)-2
5VS
GND(S)
POW_ON
136Y102176
SNSpower 5
SNS17A-CN4
SNS17C-CN20
IMGpower 3
IMG17A-CN4
PSA29A-CN7
LAMP_STB1L
GND
SNS17C 5
SNS17C-CN24
PSU29A-CN2 (ERS)
24V(ch1)-1
GND(ch1)
ERSpower 6
ERS23A-CNE41
PSU29A-CN3 (SCN)
24V(ch2)-3
GND(ch2)
15V(ch4)-1
GND(ch4)
-15V(ch5)-1
GND(ch5)
SCNpower 19
SCN17A-CN7
PSU29A-CN41 (DRV17A)
24V(ch2)-1
15V(ch4)-2
DRV17Apower 5
DRV17A-CN5
PSU29A-CN42 (DRV17B)
24V(ch2)-2
DRV17Bpower 5
DRV17B-CN25
PSU29A-CN5 (FFM)
15V(ch4)-3
136Y102174
FFMpower 12
FFM-CN1
PSU29A-CN6 (PNL)
5V(ch3)-3
PNLpower 4
PNL29A-CH101

PSU29A-TP1

信号名 Signal description	No.	No.	信号名 Signal description
+5V(ch3)	1	7	GND(ch3)
+24V(ch1)	2	8	GND(ch1)
+24V(ch2)	3	9	GND(ch2)
AUX	4	10	GND(AUX)
+15V(ch4)	5	11	GND(ch4)
−15V(ch5)	6	12	GND(ch5)

機種	5117	ユニット	
名称	回路図	補助名称	
コード	Z22Y5117100	Rev.	

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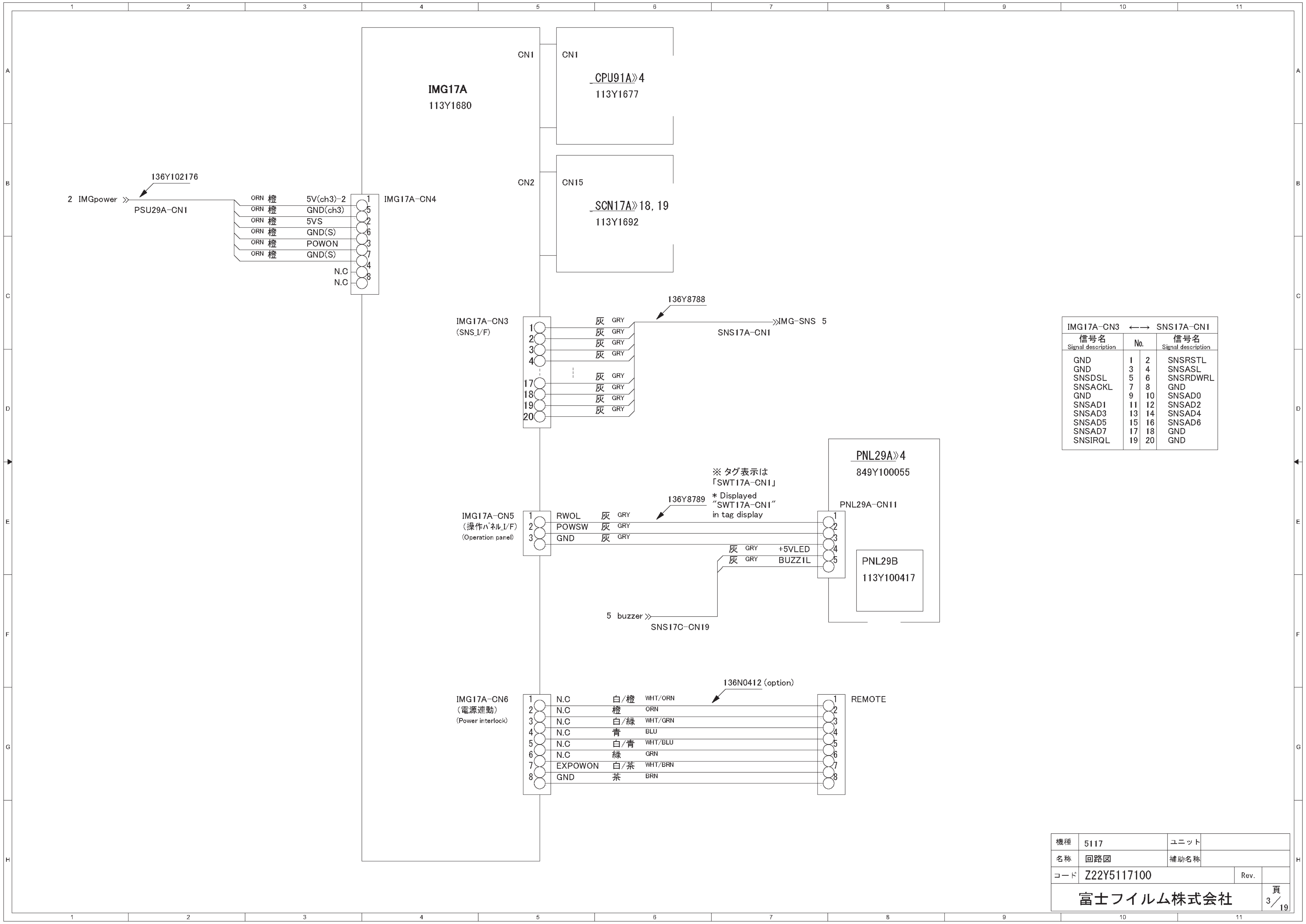
FR9H5D42.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


IMG17A
113Y1680
CN1
CN1
CPU91A》4
113Y1677
CN2
CN15
SCN17A》18, 19
113Y1692
136Y102176
2 IMGpower
PSU29A-CN1
ORN 橙 5V(ch3)-2
ORN 橙 GND(ch3)
ORN 橙 5VS
ORN 橙 GND(S)
ORN 橙 POWON
ORN 橙 GND(S)
N.C
N.C
1 5 2 6 3 7 4 8
IMG17A-CN4
IMG17A-CN3
(SNS_I/F)
1 2 3 4 17 18 19 20
灰 GRY
136Y8788
IMG-SNS 5
SNS17A-CN1
PNL29A》4
849Y100055
※ タグ表示は
「SWT17A-CN1」
* Displayed
"SWT17A-CN1"
in tag display
136Y8789
PNL29A-CN11
IMG17A-CN5
(操作パネル_I/F)
(Operation panel)
1 RWOL 灰 GRY
2 POWSW 灰 GRY
3 GND 灰 GRY
灰 GRY +5VLED
灰 GRY BUZZ1L
1 2 3 4 5
PNL29B
113Y100417
5 buzzer
SNS17C-CN19
136N0412 (option)
IMG17A-CN6
(電源連動)
(Power interlock)
1 N.C 白/橙 WHT/ORN
2 N.C 橙 ORN
3 N.C 白/緑 WHT/GRN
4 N.C 青 BLU
5 N.C 白/青 WHT/BLU
6 N.C 緑 GRN
7 EXPOWON 白/茶 WHT/BRN
8 GND 茶 BRN
REMOTE
1 2 3 4 5 6 7 8
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
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1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H

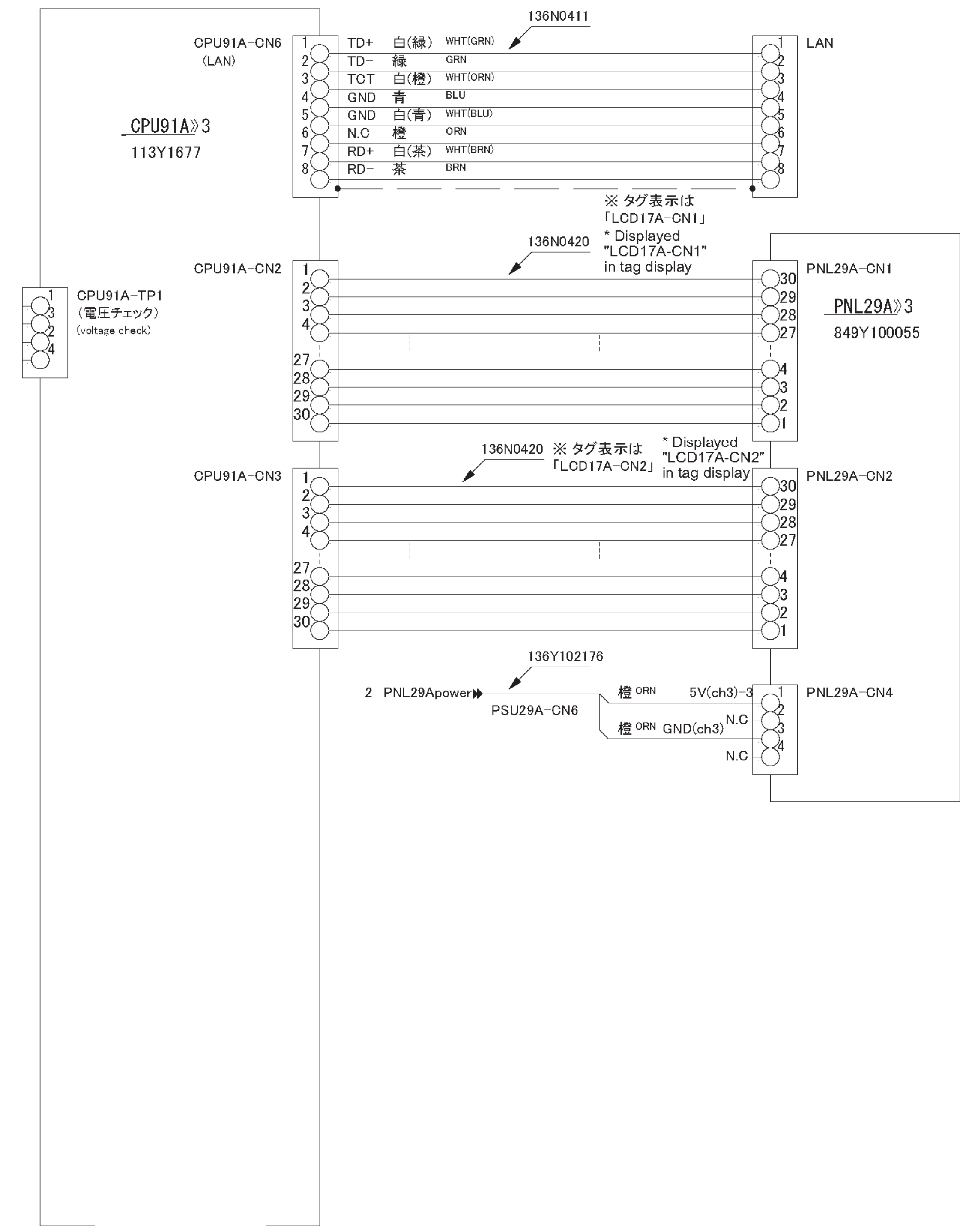
IMG17A-CN3 ←→			SNS17A-CN1
信号名 Signal description	No.		信号名 Signal description
GND	1	2	SNSRSTL
GND	3	4	SNSASL
SNSDSL	5	6	SNSRDWRL
SNSACKL	7	8	GND
GND	9	10	SNSAD0
SNSAD1	11	12	SNSAD2
SNSAD3	13	14	SNSAD4
SNSAD5	15	16	SNSAD6
SNSAD7	17	18	GND
SNSIRQL	19	20	GND

FR9H5D43.EPS

13B

回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)

CPU91A-TP1			
信号名 Signal description	No.		信号名 Signal description
+5V(ch3)-2 +5VS	1 2	3 4	N.C GND(S)


136N0411
CPU91A-CN6
(LAN)
TD+ 白(緑) WHT(GRN)
TD− 緑 GRN
TCT 白(橙) WHT(ORN)
GND 青 BLU
GND 白(青) WHT(BLU)
N.C 橙 ORN
RD+ 白(茶) WHT(BRN)
RD− 茶 BRN
LAN
CPU91A》3
113Y1677
※ タグ表示は「LCD17A-CN1」
* Displayed "LCD17A-CN1" in tag display
136N0420
CPU91A-CN2
PNL29A-CN1
PNL29A》3
849Y100055
CPU91A-TP1
(電圧チェック)
(voltage check)
136N0420 ※ タグ表示は「LCD17A-CN2」
* Displayed "LCD17A-CN2" in tag display
CPU91A-CN3
PNL29A-CN2
136Y102176
2 PNL29Apower
PSU29A-CN6
橙 ORN 5V(ch3)-3
橙 ORN GND(ch3)
N.C
N.C
PNL29A-CN4

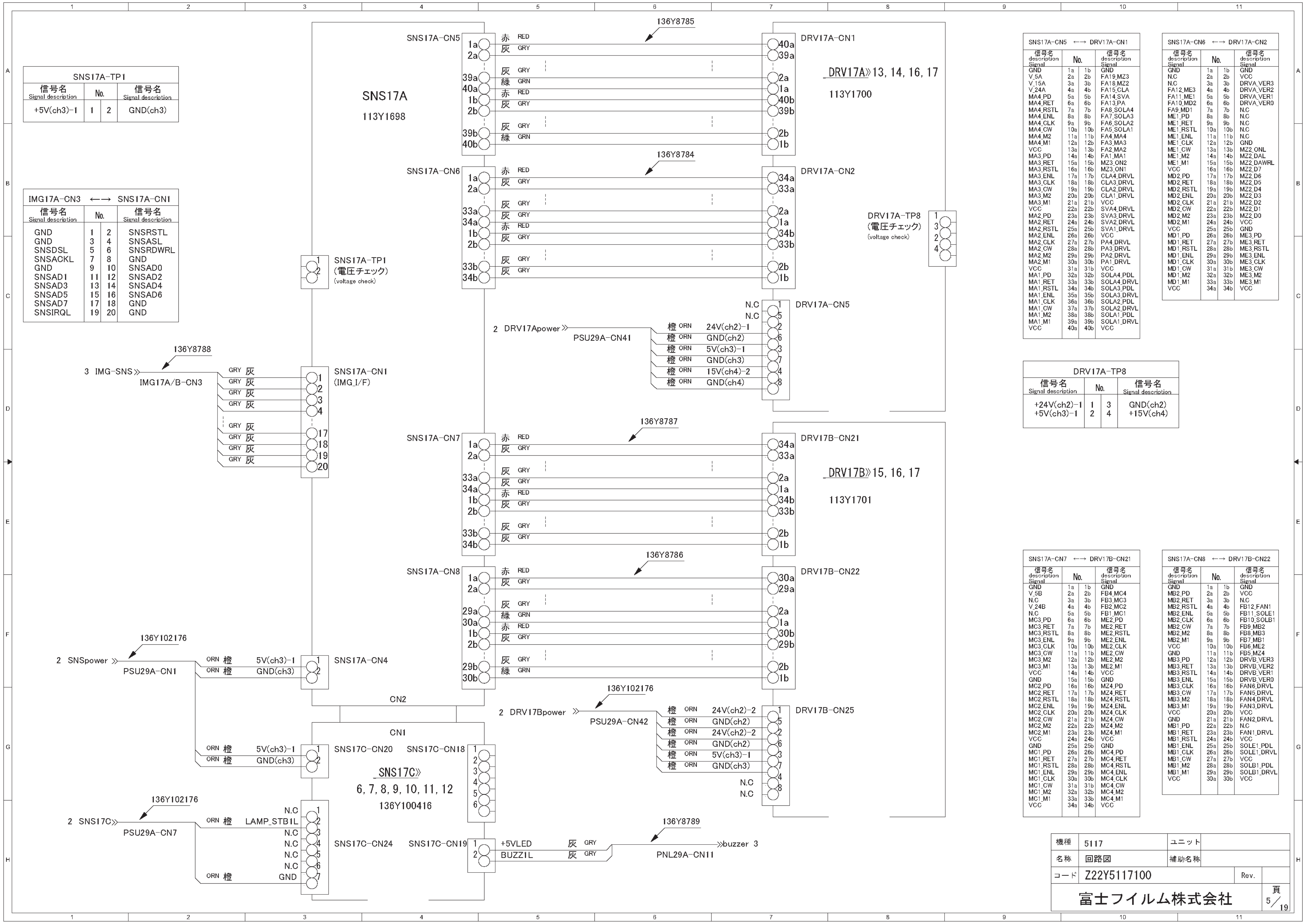
CPU91A-CN2 ←→ PNL29A-CN1					
CPU 91A	信号名 Signal description	LCD 17A	CPU 91A	信号名 Signal description	LCD 17A
1	GND	30	16	PNLAB7	15
2	PNLAB20	29	17	PNLAB6	14
3	PNLAB19	28	18	PNLAB5	13
4	PNLAB18	27	19	PNLAB4	12
5	PNLAB17	26	20	PNLAB3	11
6	PNLAB16	25	21	PNLAB2	10
7	PNLAB15	24	22	PNLAB1	9
8	PNLAB14	23	23	PNLAB0	8
9	PNLAB13	22	24	PNLMRL	7
10	PNLAB12	21	25	GND	6
11	PNLAB11	20	26	PNLBSL	5
12	PNLAB10	19	27	PNLRDL	4
13	GND	18	28	PNLWE0L	3
14	PNLAB9	17	29	PNLWE1L	2
15	PNLAB8	16	30	GND	1

CPU91A-CN3 ←→ PNL29A-CN2					
CPU 91A	信号名 Signal description	LCD 17A	CPU 91A	信号名 Signal description	LCD 17A
1	GND	30	16	PNLDB9	15
2	PNLCLK	29	17	PNLDB8	14
3	GND	28	18	GND	13
4	PNLRSTL	27	19	PNLDB7	12
5	GND	26	20	PNLDB6	11
6	PNLWAITL	25	21	PNLDB5	10
7	PNLWRL	24	22	PNLDB4	9
8	PNLCSL	23	23	PNLDB3	8
9	GND	22	24	PNLDB2	7
10	PNLDB15	21	25	PNLDB1	6
11	PNLDB14	20	26	PNLDB0	5
12	PNLDB13	19	27	GND	4
13	PNLDB12	18	28	PNLRXD	3
14	PNLDB11	17	29	PNLTXD	2
15	PNLDB10	16	30	GND	1

機種	5117	ユニット		
名称	回路図	補助名称		
コード	Z22Y5117100		Rev.	
富士フイルム株式会社				頁 4／19

FR9H5D44.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


SNS17A
113Y1698
SNS17A-CN5
SNS17A-CN6
SNS17A-CN7
SNS17A-CN8
SNS17A-TP1
(電圧チェック)
(voltage check)
SNS17A-CN1
(IMG_I/F)
SNS17A-CN4
136Y8785
136Y8784
136Y8787
136Y8786
136Y8788
136Y102176
136Y8789
赤 RED
灰 GRY
緑 GRN
橙 ORN
DRV17A-CN1
DRV17A-CN2
DRV17A-CN5
DRV17A》13, 14, 16, 17
113Y1700
DRV17A-TP8
(電圧チェック)
(voltage check)
DRV17B-CN21
DRV17B-CN22
DRV17B-CN25
DRV17B》15, 16, 17
113Y1701
2 DRV17Apower》
PSU29A-CN41
24V(ch2)-1
GND(ch2)
5V(ch3)-1
GND(ch3)
15V(ch4)-2
GND(ch4)
N.C
2 DRV17Bpower》
PSU29A-CN42
24V(ch2)-2
5V(ch3)-1
3 IMG-SNS》
IMG17A/B-CN3
2 SNSpower》
PSU29A-CN1
CN2
CN1
SNS17C-CN20
SNS17C-CN18
SNS17C》
6, 7, 8, 9, 10, 11, 12
136Y100416
2 SNS17C》
PSU29A-CN7
LAMP_STB1L
SNS17C-CN24
SNS17C-CN19
+5VLED
BUZZ1L
》buzzer 3
PNL29A-CN11

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SNS17A-TP1

信号名 Signal description	No.	No.	信号名 Signal description
+5V(ch3)-1	1	2	GND(ch3)

IMG17A-CN3 ←→ SNS17A-CN1

信号名 Signal description	No.	No.	信号名 Signal description
GND	1	2	SNSRSTL
GND	3	4	SNSASL
SNSDSL	5	6	SNSRDWRL
SNSACKL	7	8	GND
GND	9	10	SNSAD0
SNSAD1	11	12	SNSAD2
SNSAD3	13	14	SNSAD4
SNSAD5	15	16	SNSAD6
SNSAD7	17	18	GND
SNSIRQL	19	20	GND

SNS17A-CN5 ←→ DRV17A-CN1

信号名 description Signal	No.	No.	信号名 description Signal
GND	1a	1b	GND
V_5A	2a	2b	FA19_MZ3
V_15A	3a	3b	FA18_MZ2
V_24A	4a	4b	FA15_CLA
MA4_PD	5a	5b	FA14_SVA
MA4_RET	6a	6b	FA13_PA
MA4_RSTL	7a	7b	FA8_SOLA4
MA4_ENL	8a	8b	FA7_SOLA3
MA4_CLK	9a	9b	FA6_SOLA2
MA4_CW	10a	10b	FA5_SOLA1
MA4_M2	11a	11b	FA4_MA4
MA4_M1	12a	12b	FA3_MA3
VCC	13a	13b	FA2_MA2
MA3_PD	14a	14b	FA1_MA1
MA3_RET	15a	15b	MZ3_ON2
MA3_RSTL	16a	16b	MZ3_ON1
MA3_ENL	17a	17b	CLA4_DRVL
MA3_CLK	18a	18b	CLA3_DRVL
MA3_CW	19a	19b	CLA2_DRVL
MA3_M2	20a	20b	CLA1_DRVL
MA3_M1	21a	21b	VCC
VCC	22a	22b	SVA4_DRVL
MA2_PD	23a	23b	SVA3_DRVL
MA2_RET	24a	24b	SVA2_DRVL
MA2_RSTL	25a	25b	SVA1_DRVL
MA2_ENL	26a	26b	VCC
MA2_CLK	27a	27b	PA4_DRVL
MA2_CW	28a	28b	PA3_DRVL
MA2_M2	29a	29b	PA2_DRVL
MA2_M1	30a	30b	PA1_DRVL
VCC	31a	31b	VCC
MA1_PD	32a	32b	SOLA4_PDL
MA1_RET	33a	33b	SOLA4_DRVL
MA1_RSTL	34a	34b	SOLA3_PDL
MA1_ENL	35a	35b	SOLA3_DRVL
MA1_CLK	36a	36b	SOLA2_PDL
MA1_CW	37a	37b	SOLA2_DRVL
MA1_M2	38a	38b	SOLA1_PDL
MA1_M1	39a	39b	SOLA1_DRVL
VCC	40a	40b	VCC

SNS17A-CN6 ←→ DRV17A-CN2

信号名 description Signal	No.	No.	信号名 description Signal
GND	1a	1b	GND
N.C	2a	2b	VCC
N.C	3a	3b	DRVA_VER3
FA12_ME3	4a	4b	DRVA_VER2
FA11_ME1	5a	5b	DRVA_VER1
FA10_MD2	6a	6b	DRVA_VER0
FA9_MD1	7a	7b	N.C
ME1_PD	8a	8b	N.C
ME1_RET	9a	9b	N.C
ME1_RSTL	10a	10b	N.C
ME1_ENL	11a	11b	N.C
ME1_CLK	12a	12b	GND
ME1_CW	13a	13b	MZ2_ONL
ME1_M2	14a	14b	MZ2_DAL
ME1_M1	15a	15b	MZ2_DAWRL
VCC	16a	16b	MZ2_D7
MD2_PD	17a	17b	MZ2_D6
MD2_RET	18a	18b	MZ2_D5
MD2_RSTL	19a	19b	MZ2_D4
MD2_ENL	20a	20b	MZ2_D3
MD2_CLK	21a	21b	MZ2_D2
MD2_CW	22a	22b	MZ2_D1
MD2_M2	23a	23b	MZ2_D0
MD2_M1	24a	24b	VCC
VCC	25a	25b	GND
MD1_PD	26a	26b	ME3_PD
MD1_RET	27a	27b	ME3_RET
MD1_RSTL	28a	28b	ME3_RSTL
MD1_ENL	29a	29b	ME3_ENL
MD1_CLK	30a	30b	ME3_CLK
MD1_CW	31a	31b	ME3_CW
MD1_M2	32a	32b	ME3_M2
MD1_M1	33a	33b	ME3_M1
VCC	34a	34b	VCC

DRV17A-TP8

信号名 Signal description	No.	No.	信号名 Signal description
+24V(ch2)-1	1	3	GND(ch2)
+5V(ch3)-1	2	4	+15V(ch4)

SNS17A-CN7 ←→ DRV17B-CN21

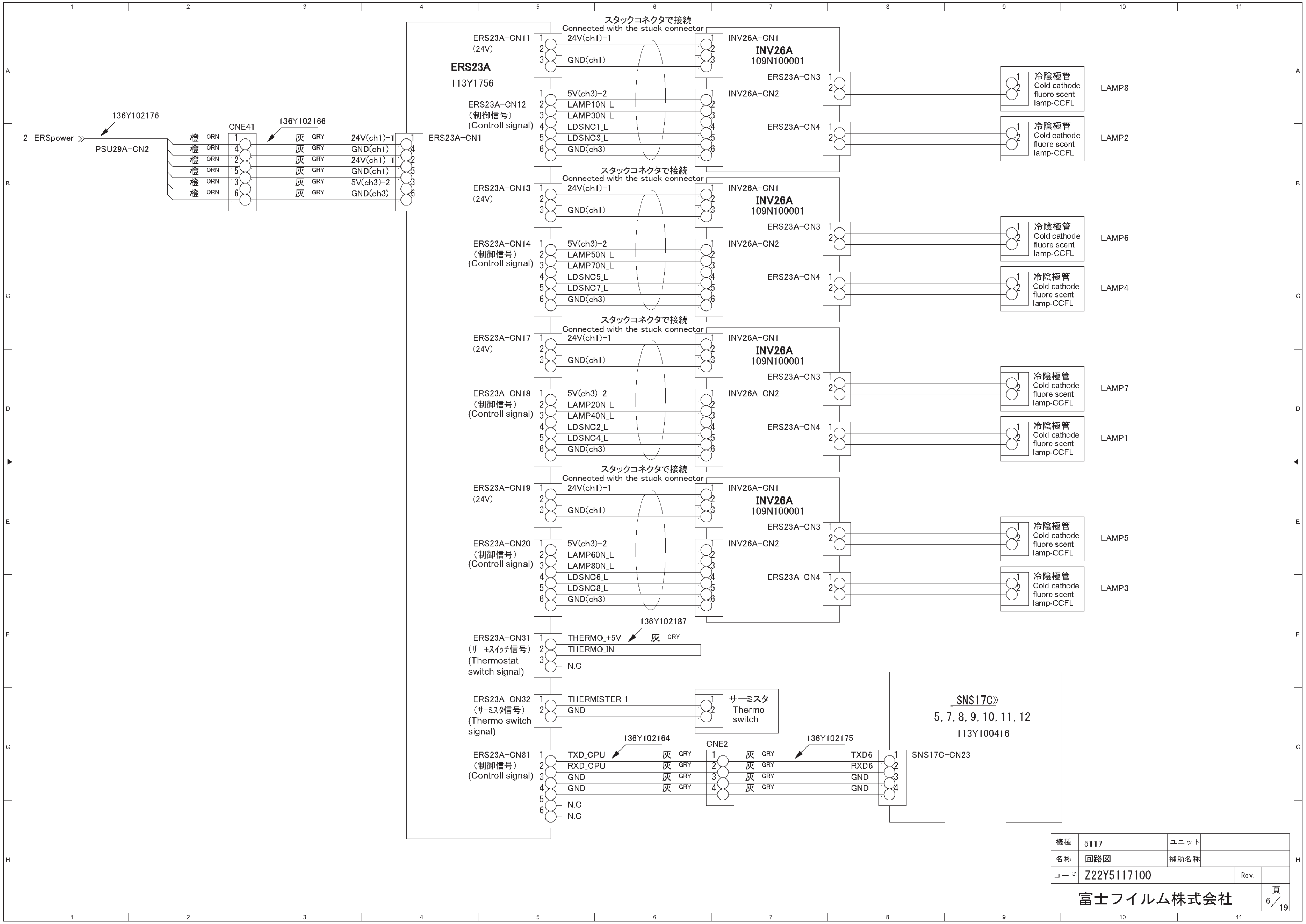
信号名 description Signal	No.	No.	信号名 description Signal
GND	1a	1b	GND
V_5B	2a	2b	FB4_MC4
N.C	3a	3b	FB3_MC3
V_24B	4a	4b	FB2_MC2
N.C	5a	5b	FB1_MC1
MC3_PD	6a	6b	ME2_PD
MC3_RET	7a	7b	ME2_RET
MC3_RSTL	8a	8b	ME2_RSTL
MC3_ENL	9a	9b	ME2_ENL
MC3_CLK	10a	10b	ME2_CLK
MC3_CW	11a	11b	ME2_CW
MC3_M2	12a	12b	ME2_M2
MC3_M1	13a	13b	ME2_M1
VCC	14a	14b	VCC
GND	15a	15b	GND
MC2_PD	16a	16b	MZ4_PD
MC2_RET	17a	17b	MZ4_RET
MC2_RSTL	18a	18b	MZ4_RSTL
MC2_ENL	19a	19b	MZ4_ENL
MC2_CLK	20a	20b	MZ4_CLK
MC2_CW	21a	21b	MZ4_CW
MC2_M2	22a	22b	MZ4_M2
MC2_M1	23a	23b	MZ4_M1
VCC	24a	24b	VCC
GND	25a	25b	GND
MC1_PD	26a	26b	MC4_PD
MC1_RET	27a	27b	MC4_RET
MC1_RSTL	28a	28b	MC4_RSTL
MC1_ENL	29a	29b	MC4_ENL
MC1_CLK	30a	30b	MC4_CLK
MC1_CW	31a	31b	MC4_CW
MC1_M2	32a	32b	MC4_M2
MC1_M1	33a	33b	MC4_M1
VCC	34a	34b	VCC

SNS17A-CN8 ←→ DRV17B-CN22

信号名 description Signal	No.	No.	信号名 description Signal
GND	1a	1b	GND
MB2_PD	2a	2b	VCC
MB2_RET	3a	3b	N.C
MB2_RSTL	4a	4b	FB12_FAN1
MB2_ENL	5a	5b	FB11_SOLE1
MB2_CLK	6a	6b	FB10_SOLB1
MB2_CW	7a	7b	FB9_MB2
MB2_M2	8a	8b	FB8_MB3
MB2_M1	9a	9b	FB7_MB1
VCC	10a	10b	FB6_ME2
GND	11a	11b	FB5_MZ4
MB3_PD	12a	12b	DRVB_VER3
MB3_RET	13a	13b	DRVB_VER2
MB3_RSTL	14a	14b	DRVB_VER1
MB3_ENL	15a	15b	DRVB_VER0
MB3_CLK	16a	16b	FAN6_DRVL
MB3_CW	17a	17b	FAN5_DRVL
MB3_M2	18a	18b	FAN4_DRVL
MB3_M1	19a	19b	FAN3_DRVL
VCC	20a	20b	VCC
GND	21a	21b	FAN2_DRVL
MB1_PD	22a	22b	N.C
MB1_RET	23a	23b	FAN1_DRVL
MB1_RSTL	24a	24b	VCC
MB1_ENL	25a	25b	SOLE1_PDL
MB1_CLK	26a	26b	SOLE1_DRVL
MB1_CW	27a	27b	VCC
MB1_M2	28a	28b	SOLB1_PDL
MB1_M1	29a	29b	SOLB1_DRVL
VCC	30a	30b	VCC

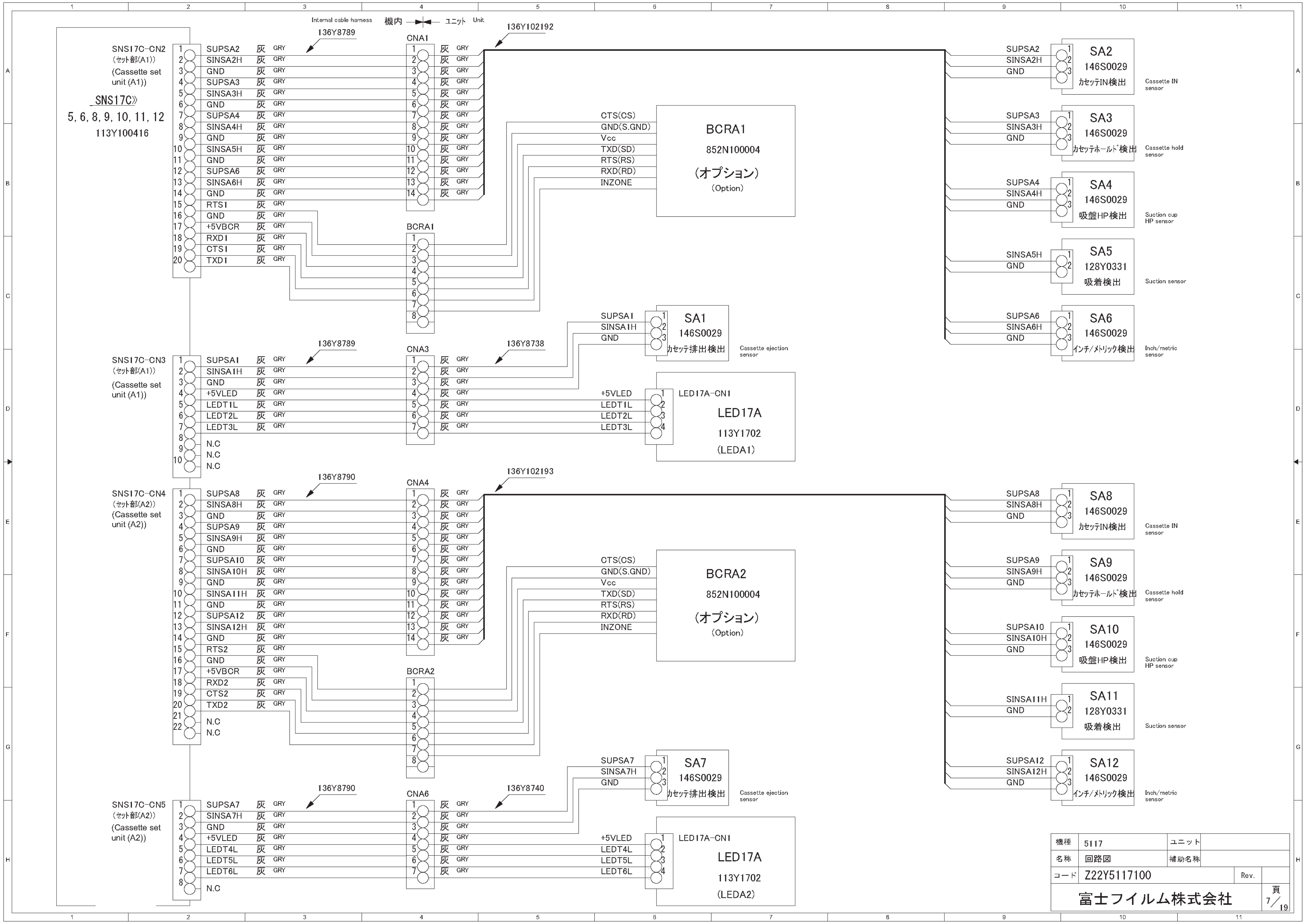
機種	5117	ユニット	
名称	回路図	補助名称	
コード	Z22Y5117100	Rev.	
富士フイルム株式会社			頁 5/19

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


2 ERSpower
136Y102176
PSU29A-CN2
CNE41
136Y102166
橙 ORN
灰 GRY
24V(ch1)-1
GND(ch1)
24V(ch1)-1
GND(ch1)
5V(ch3)-2
GND(ch3)
ERS23A-CN1
ERS23A
113Y1756
スタックコネクタで接続
Connected with the stuck connector
ERS23A-CN11 (24V)
ERS23A-CN12 (制御信号) (Controll signal)
LAMP1ON_L
LAMP3ON_L
LDSNC1_L
LDSNC3_L
ERS23A-CN13 (24V)
ERS23A-CN14 (制御信号) (Controll signal)
LAMP5ON_L
LAMP7ON_L
LDSNC5_L
LDSNC7_L
ERS23A-CN17 (24V)
ERS23A-CN18 (制御信号) (Controll signal)
LAMP2ON_L
LAMP4ON_L
LDSNC2_L
LDSNC4_L
ERS23A-CN19 (24V)
ERS23A-CN20 (制御信号) (Controll signal)
LAMP6ON_L
LAMP8ON_L
LDSNC6_L
LDSNC8_L
INV26A-CN1
INV26A-CN2
INV26A
109N100001
ERS23A-CN3
ERS23A-CN4
冷陰極管 Cold cathode fluore scent lamp-CCFL
LAMP8
LAMP2
LAMP6
LAMP4
LAMP7
LAMP1
LAMP5
LAMP3
136Y102187
ERS23A-CN31 (サーモスイッチ信号) (Thermostat switch signal)
THERMO_+5V
THERMO_IN
N.C
ERS23A-CN32 (サーミスタ信号) (Thermo switch signal)
THERMISTER 1
GND
サーミスタ Thermo switch
136Y102164
ERS23A-CN81 (制御信号) (Controll signal)
TXD_CPU
RXD_CPU
CNE2
136Y102175
TXD6
RXD6
SNS17C-CN23
SNS17C»
5, 7, 8, 9, 10, 11, 12
113Y100416
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
頁 6／19

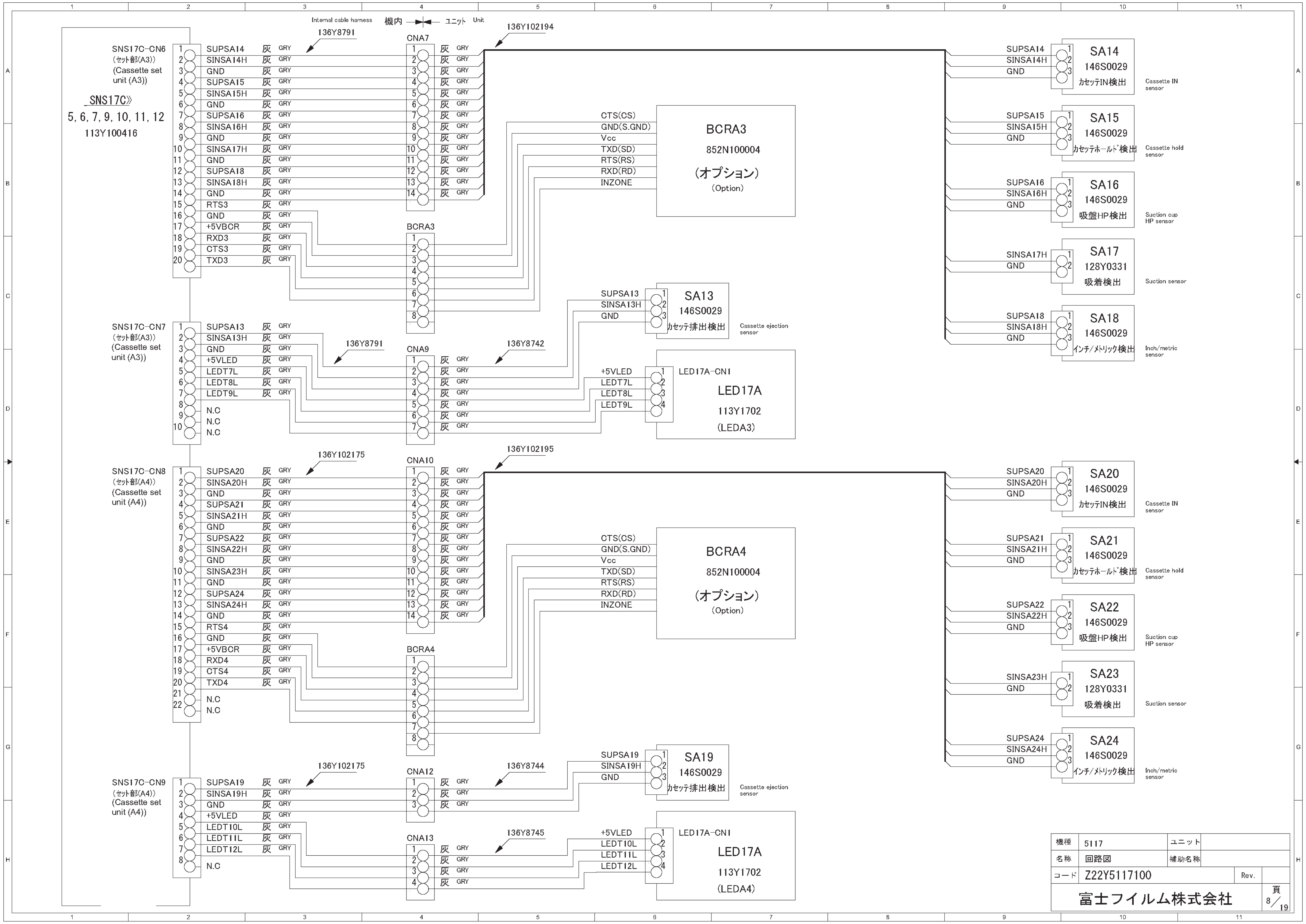
FR9H5D46.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness
機内
ユニット Unit
136Y8789
136Y102192
CNA1
SNS17C-CN2
(セット部(A1))
(Cassette set unit (A1))
SNS17C》
5, 6, 8, 9, 10, 11, 12
113Y100416
SUPSA2
SINSA2H
GND
SUPSA3
SINSA3H
SUPSA4
SINSA4H
SINSA5H
SUPSA6
SINSA6H
RTS1
+5VBCR
RXD1
CTS1
TXD1
灰 GRY
BCRA1
CTS(CS)
GND(S.GND)
Vcc
TXD(SD)
RTS(RS)
RXD(RD)
INZONE
BCRA1
852N100004
(オプション)
(Option)
SA2
146S0029
カセッテIN検出
Cassette IN sensor
SA3
146S0029
カセッテホールド検出
Cassette hold sensor
SA4
146S0029
吸盤HP検出
Suction cup HP sensor
SA5
128Y0331
吸着検出
Suction sensor
SA6
146S0029
インチ/メトリック検出
Inch/metric sensor
SUPSA1
SINSA1H
SA1
146S0029
カセッテ排出検出
Cassette ejection sensor
136Y8789
136Y8738
CNA3
SNS17C-CN3
(セット部(A1))
(Cassette set unit (A1))
+5VLED
LEDT1L
LEDT2L
LEDT3L
N.C
LED17A-CN1
LED17A
113Y1702
(LEDA1)
136Y8790
136Y102193
CNA4
SNS17C-CN4
(セット部(A2))
(Cassette set unit (A2))
SUPSA8
SINSA8H
SUPSA9
SINSA9H
SUPSA10
SINSA10H
SINSA11H
SUPSA12
SINSA12H
RTS2
RXD2
CTS2
TXD2
BCRA2
BCRA2
852N100004
(オプション)
(Option)
SA8
146S0029
カセッテIN検出
Cassette IN sensor
SA9
146S0029
カセッテホールド検出
Cassette hold sensor
SA10
146S0029
吸盤HP検出
Suction cup HP sensor
SA11
128Y0331
吸着検出
Suction sensor
SA12
146S0029
インチ/メトリック検出
Inch/metric sensor
SUPSA7
SINSA7H
SA7
146S0029
カセッテ排出検出
Cassette ejection sensor
136Y8790
136Y8740
CNA6
SNS17C-CN5
(セット部(A2))
(Cassette set unit (A2))
LEDT4L
LEDT5L
LEDT6L
LED17A-CN1
LED17A
113Y1702
(LEDA2)
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
頁 7/19

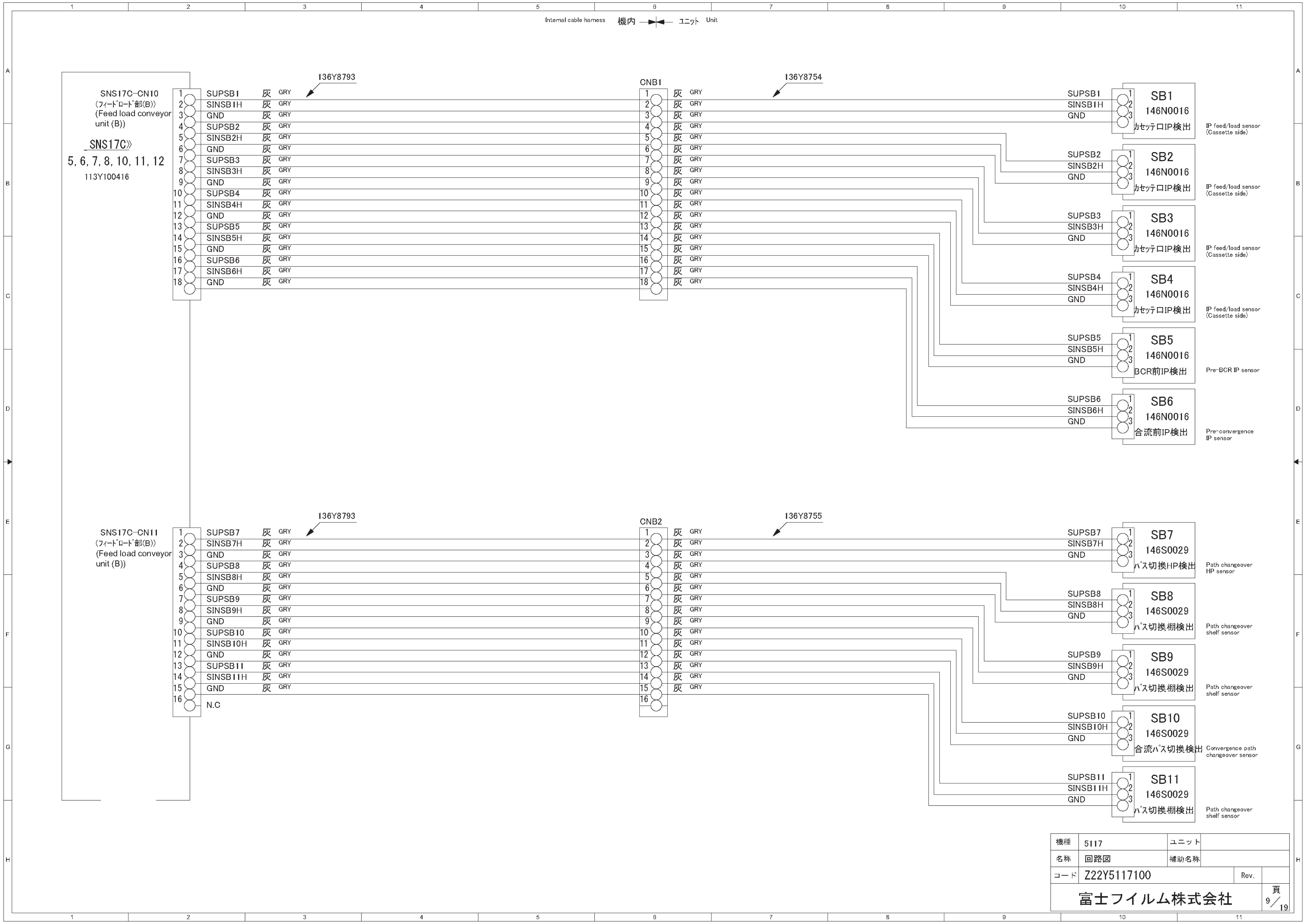
FR9H5D47.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness
機内
ユニット Unit
SNS17C-CN6
(セット部(A3))
(Cassette set unit (A3))
SNS17C》
5, 6, 7, 9, 10, 11, 12
113Y100416
SUPSA14
SINSA14H
GND
SUPSA15
SINSA15H
SUPSA16
SINSA16H
SINSA17H
SUPSA18
SINSA18H
RTS3
+5VBCR
RXD3
CTS3
TXD3
灰 GRY
136Y8791
CNA7
136Y102194
BCRA3
CTS(CS)
GND(S.GND)
Vcc
TXD(SD)
RTS(RS)
RXD(RD)
INZONE
852N100004
(オプション)
(Option)
SA14
146S0029
カセッテIN検出
Cassette IN sensor
SA15
カセッテホールド検出
Cassette hold sensor
SA16
吸盤HP検出
Suction cup HP sensor
SA17
128Y0331
吸着検出
Suction sensor
SA18
インチ/メトリック検出
Inch/metric sensor
SNS17C-CN7
SUPSA13
SINSA13H
+5VLED
LEDT7L
LEDT8L
LEDT9L
N.C
CNA9
136Y8742
SA13
カセッテ排出検出
Cassette ejection sensor
LED17A-CN1
LED17A
113Y1702
(LEDA3)
SNS17C-CN8
(セット部(A4))
(Cassette set unit (A4))
SUPSA20
SINSA20H
SUPSA21
SINSA21H
SUPSA22
SINSA22H
SINSA23H
SUPSA24
SINSA24H
RTS4
RXD4
CTS4
TXD4
136Y102175
CNA10
136Y102195
BCRA4
SA20
SA21
SA22
SA23
SA24
SNS17C-CN9
SUPSA19
SINSA19H
LEDT10L
LEDT11L
LEDT12L
CNA12
136Y8744
SA19
CNA13
136Y8745
(LEDA4)
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
頁 8/19

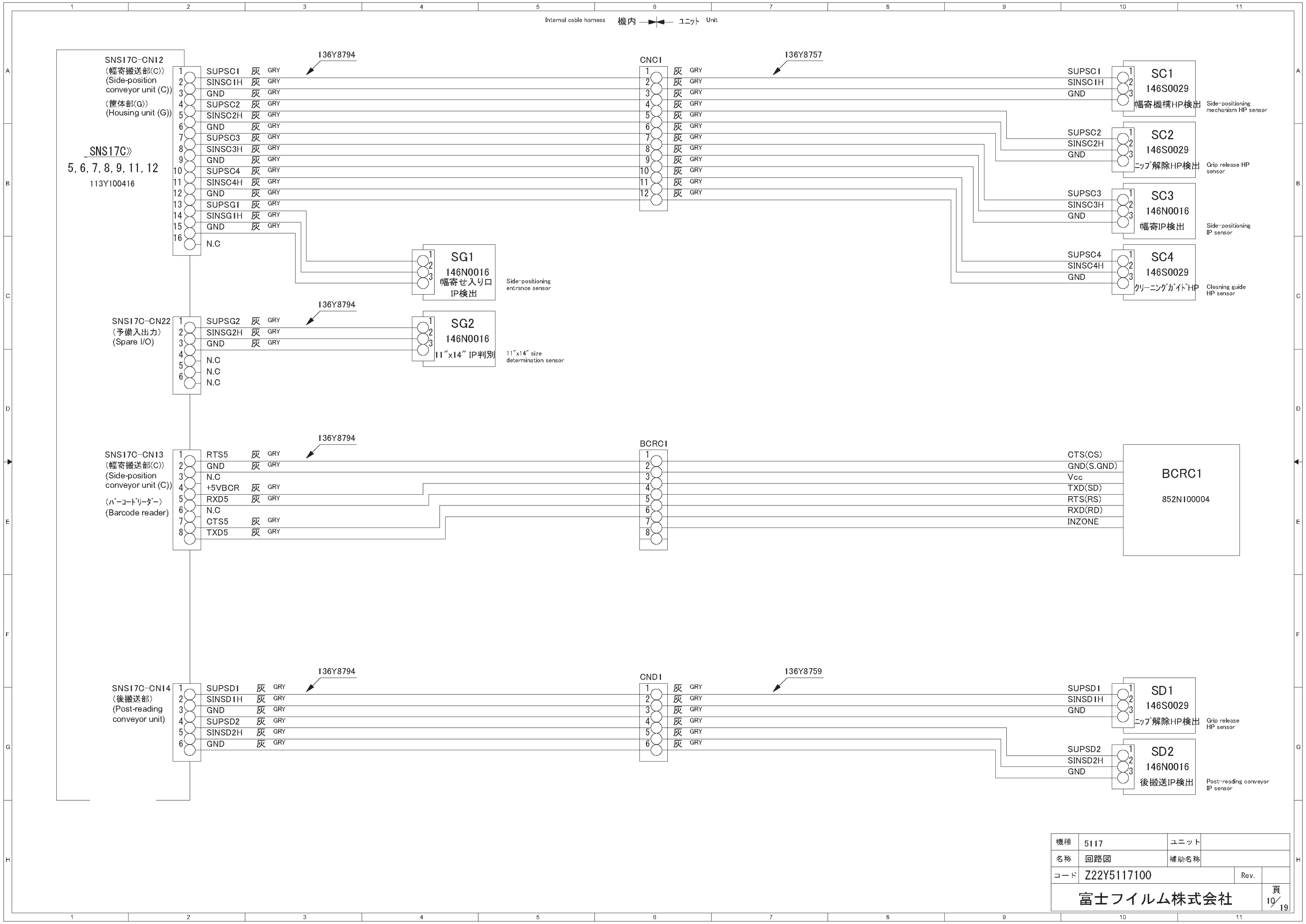
FR9H5D48.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
SNS17C-CN10
(フィードロード部(B))
(Feed load conveyor unit (B))
SNS17C》
5, 6, 7, 8, 10, 11, 12
113Y100416
136Y8793
CNB1
136Y8754
SUPSB1
SINSB1H
GND
SUPSB2
SINSB2H
GND
SUPSB3
SINSB3H
GND
SUPSB4
SINSB4H
GND
SUPSB5
SINSB5H
GND
SUPSB6
SINSB6H
GND
灰 GRY
SB1 146N0016 カセッテ口IP検出
IP feed/load sensor (Cassette side)
SB2 146N0016 カセッテ口IP検出
IP feed/load sensor (Cassette side)
SB3 146N0016 カセッテ口IP検出
IP feed/load sensor (Cassette side)
SB4 146N0016 カセッテ口IP検出
IP feed/load sensor (Cassette side)
SB5 146N0016 BCR前IP検出
Pre-BCR IP sensor
SB6 146N0016 合流前IP検出
Pre-convergence IP sensor
SNS17C-CN11
(フィードロード部(B))
(Feed load conveyor unit (B))
136Y8793
CNB2
136Y8755
SUPSB7
SINSB7H
GND
SUPSB8
SINSB8H
GND
SUPSB9
SINSB9H
GND
SUPSB10
SINSB10H
GND
SUPSB11
SINSB11H
GND
N.C
SB7 146S0029 パス切換HP検出
Path changeover HP sensor
SB8 146S0029 パス切換棚検出
Path changeover shelf sensor
SB9 146S0029 パス切換棚検出
Path changeover shelf sensor
SB10 146S0029 合流パス切換検出
Convergence path changeover sensor
SB11 146S0029 パス切換棚検出
Path changeover shelf sensor
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
頁 9／19

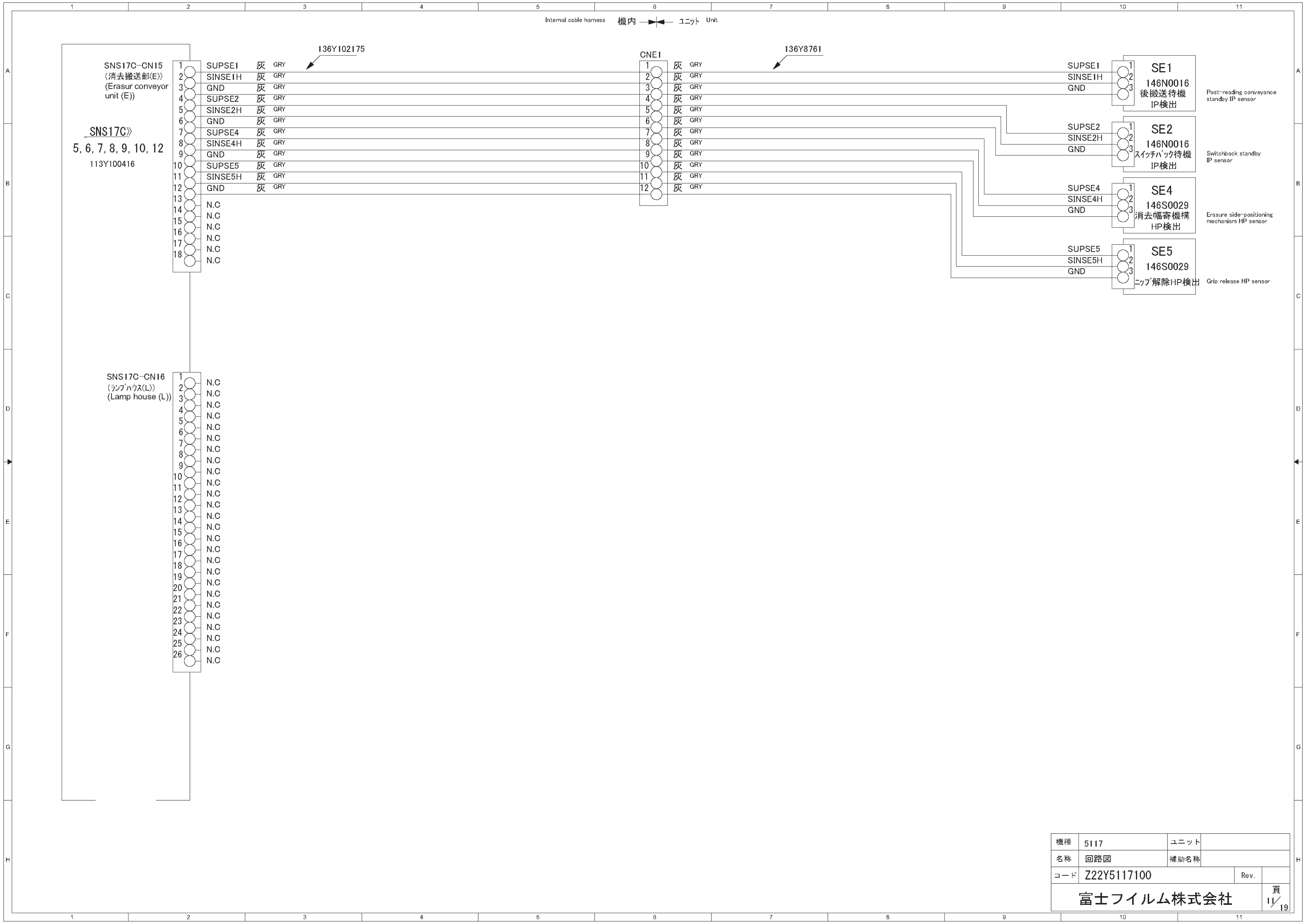
FR9H5D49.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
SNS17C-CN12
(幅寄搬送部(C))
(Side-position conveyor unit (C))
(筐体部(G))
(Housing unit (G))
SNS17C》
5, 6, 7, 8, 9, 11, 12
113Y100416
1 SUPSC1 灰 GRY
2 SINSC1H 灰 GRY
3 GND 灰 GRY
4 SUPSC2 灰 GRY
5 SINSC2H 灰 GRY
6 GND 灰 GRY
7 SUPSC3 灰 GRY
8 SINSC3H 灰 GRY
9 GND 灰 GRY
10 SUPSC4 灰 GRY
11 SINSC4H 灰 GRY
12 GND 灰 GRY
13 SUPSG1 灰 GRY
14 SINSG1H 灰 GRY
15 GND 灰 GRY
16 N.C
136Y8794
CNC1
136Y8757
SC1 146S0029 幅寄機構HP検出
Side-positioning mechanism HP sensor
SC2 146S0029 ニップ解除HP検出
Grip release HP sensor
SC3 146N0016 幅寄IP検出
Side-positioning IP sensor
SC4 146S0029 クリーニングガイドHP
Cleaning guide HP sensor
SG1 146N0016 幅寄せ入り口 IP検出
Side-positioning entrance sensor
SNS17C-CN22
(予備入出力)
(Spare I/O)
1 SUPSG2 灰 GRY
2 SINSG2H 灰 GRY
3 GND 灰 GRY
4 N.C
5 N.C
6 N.C
SG2 146N0016 11″x14″ IP判別
11″x14″ size determination sensor
SNS17C-CN13
(幅寄搬送部(C))
(Side-position conveyor unit (C))
(バーコードリーダー)
(Barcode reader)
1 RTS5 灰 GRY
2 GND 灰 GRY
3 N.C
4 +5VBCR 灰 GRY
5 RXD5 灰 GRY
6 N.C
7 CTS5 灰 GRY
8 TXD5 灰 GRY
BCRC1
CTS(CS)
GND(S.GND)
Vcc
TXD(SD)
RTS(RS)
RXD(RD)
INZONE
BCRC1 852N100004
SNS17C-CN14
(後搬送部)
(Post-reading conveyor unit)
1 SUPSD1 灰 GRY
2 SINSD1H 灰 GRY
3 GND 灰 GRY
4 SUPSD2 灰 GRY
5 SINSD2H 灰 GRY
6 GND 灰 GRY
CND1
136Y8759
SD1 146S0029 ニップ解除HP検出
Grip release HP sensor
SD2 146N0016 後搬送IP検出
Post-reading conveyor IP sensor
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
頁 10/19

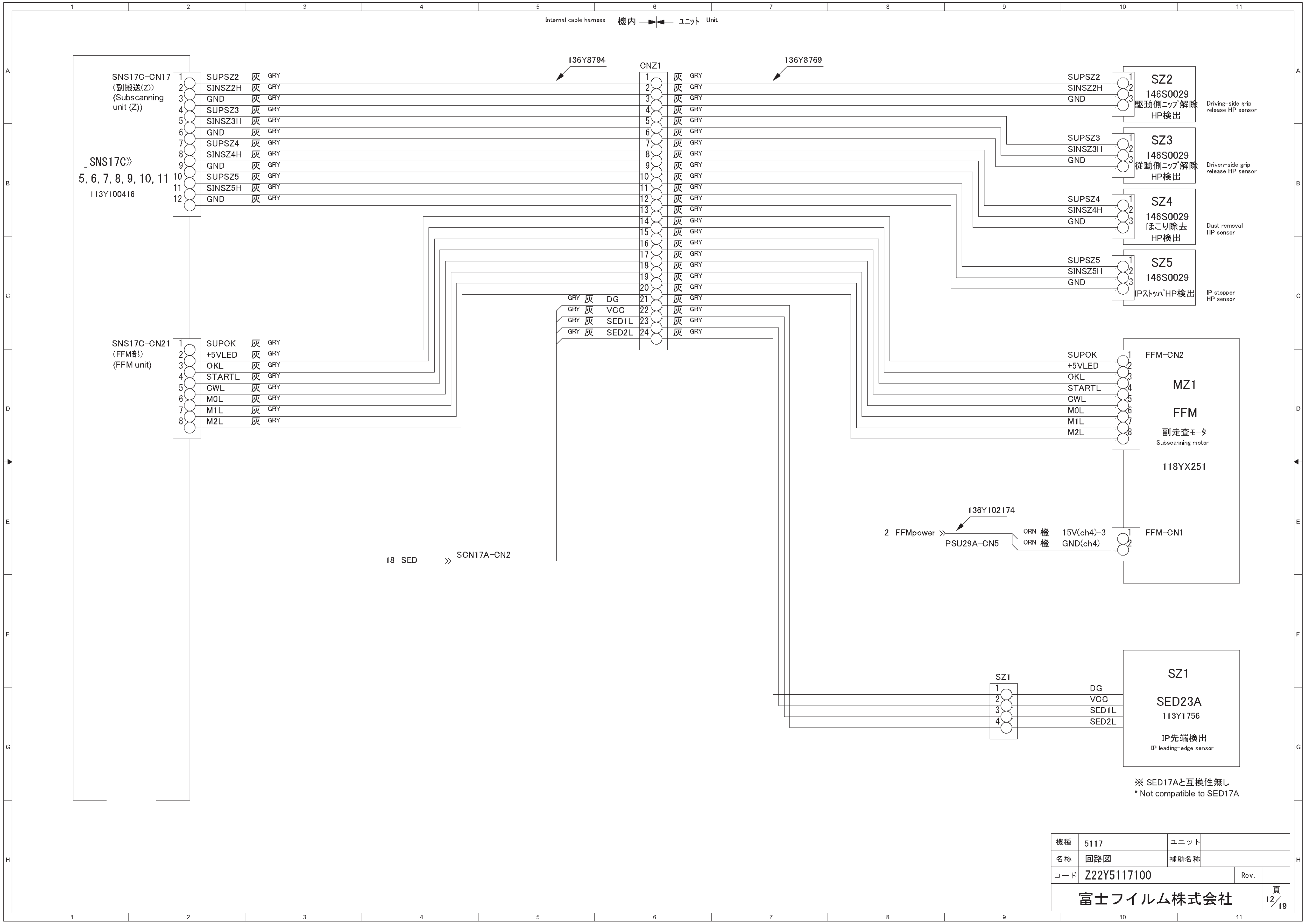
FR9H5D50.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness
機内
ユニット
Unit
SNS17C-CN15
(消去搬送部(E))
(Erasur conveyor unit (E))
SNS17C》
5, 6, 7, 8, 9, 10, 12
113Y100416
136Y102175
1 SUPSE1 灰 GRY
2 SINSE1H 灰 GRY
3 GND 灰 GRY
4 SUPSE2 灰 GRY
5 SINSE2H 灰 GRY
6 GND 灰 GRY
7 SUPSE4 灰 GRY
8 SINSE4H 灰 GRY
9 GND 灰 GRY
10 SUPSE5 灰 GRY
11 SINSE5H 灰 GRY
12 GND 灰 GRY
13 N.C
14 N.C
15 N.C
16 N.C
17 N.C
18 N.C
CNE1
136Y8761
SE1
146N0016
後搬送待機
IP検出
Post-reading conveyance standby IP sensor
SE2
146N0016
スイッチバック待機
IP検出
Switchback standby IP sensor
SE4
146S0029
消去幅寄機構
HP検出
Erasure side-positioning mechanism HP sensor
SE5
146S0029
ニップ解除HP検出
Grip release HP sensor
SUPSE1
SINSE1H
GND
SUPSE2
SINSE2H
SUPSE4
SINSE4H
SUPSE5
SINSE5H
SNS17C-CN16
(ランプハウス(L))
(Lamp house (L))
1–26 N.C
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
頁 11/19

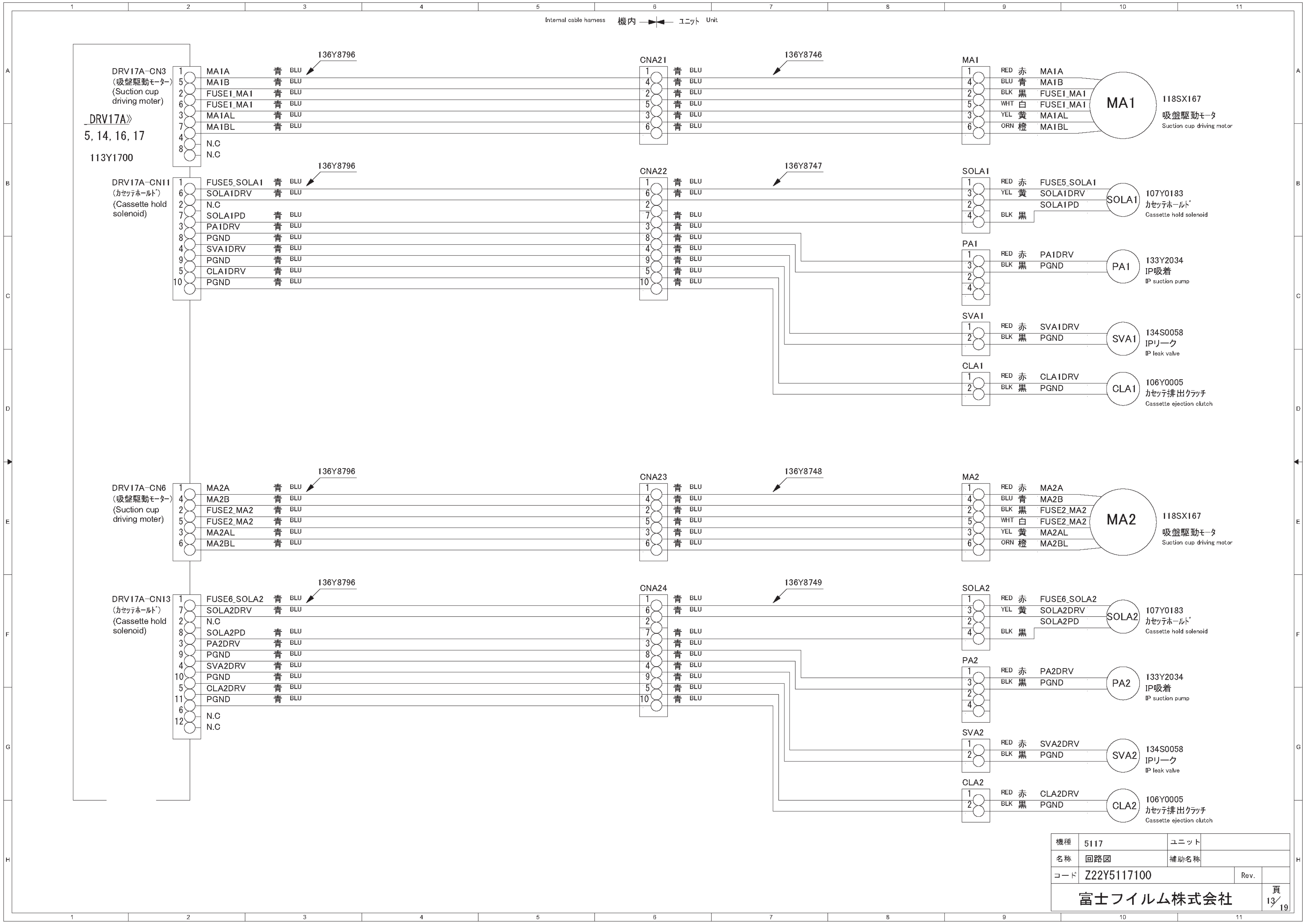
FR9H5D51.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
136Y8794
CNZ1
136Y8769
SNS17C-CN17
(副搬送(Z))
(Subscanning unit (Z))
SNS17C》
5, 6, 7, 8, 9, 10, 11
113Y100416
1 SUPSZ2 灰 GRY
2 SINSZ2H 灰 GRY
3 GND 灰 GRY
4 SUPSZ3 灰 GRY
5 SINSZ3H 灰 GRY
6 GND 灰 GRY
7 SUPSZ4 灰 GRY
8 SINSZ4H 灰 GRY
9 GND 灰 GRY
10 SUPSZ5 灰 GRY
11 SINSZ5H 灰 GRY
12 GND 灰 GRY
SNS17C-CN21
(FFM部)
(FFM unit)
1 SUPOK 灰 GRY
2 +5VLED 灰 GRY
3 OKL 灰 GRY
4 STARTL 灰 GRY
5 CWL 灰 GRY
6 M0L 灰 GRY
7 M1L 灰 GRY
8 M2L 灰 GRY
GRY 灰 DG 21
GRY 灰 VCC 22
GRY 灰 SED1L 23
GRY 灰 SED2L 24
18 SED 》 SCN17A-CN2
SUPSZ2 SINSZ2H GND
SZ2 146S0029 駆動側ニップ解除 HP検出
Driving-side grip release HP sensor
SUPSZ3 SINSZ3H GND
SZ3 146S0029 従動側ニップ解除 HP検出
Driven-side grip release HP sensor
SUPSZ4 SINSZ4H GND
SZ4 146S0029 ほこり除去 HP検出
Dust removal HP sensor
SUPSZ5 SINSZ5H GND
SZ5 146S0029 IPストッパHP検出
IP stopper HP sensor
SUPOK +5VLED OKL STARTL CWL M0L M1L M2L
FFM-CN2
MZ1
FFM
副走査モータ
Subscanning motor
118YX251
136Y102174
2 FFMpower 》 PSU29A-CN5
ORN 橙 15V(ch4)-3
ORN 橙 GND(ch4)
FFM-CN1
SZ1
DG VCC SED1L SED2L
SZ1
SED23A
113Y1756
IP先端検出
IP leading-edge sensor
※ SED17Aと互換性無し
* Not compatible to SED17A
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
頁 12/19

FR9H5D52.EPS

13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
DRV17A-CN3 (吸盤駆動モーター) (Suction cup driving moter)
DRV17A》 5, 14, 16, 17
113Y1700
MA1A
MA1B
FUSE1_MA1
MA1AL
MA1BL
N.C
136Y8796
CNA21
136Y8746
MA1
RED 赤
BLU 青
BLK 黒
WHT 白
YEL 黄
ORN 橙
MA1
118SX167 吸盤駆動モータ Suction cup driving motor
DRV17A-CN11 (カセッテホールド) (Cassette hold solenoid)
FUSE5_SOLA1
SOLA1DRV
SOLA1PD
PA1DRV
PGND
SVA1DRV
CLA1DRV
CNA22
136Y8747
SOLA1
107Y0183 カセッテホールド Cassette hold solenoid
PA1
133Y2034 IP吸着 IP suction pump
SVA1
134S0058 IPリーク IP leak valve
CLA1
106Y0005 カセッテ排出クラッチ Cassette ejection clutch
DRV17A-CN6 (吸盤駆動モーター) (Suction cup driving moter)
MA2A
MA2B
FUSE2_MA2
MA2AL
MA2BL
CNA23
136Y8748
MA2
118SX167 吸盤駆動モータ Suction cup driving motor
DRV17A-CN13 (カセッテホールド) (Cassette hold solenoid)
FUSE6_SOLA2
SOLA2DRV
SOLA2PD
PA2DRV
SVA2DRV
CLA2DRV
CNA24
136Y8749
SOLA2
107Y0183 カセッテホールド Cassette hold solenoid
PA2
133Y2034 IP吸着 IP suction pump
SVA2
134S0058 IPリーク IP leak valve
CLA2
106Y0005 カセッテ排出クラッチ Cassette ejection clutch
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
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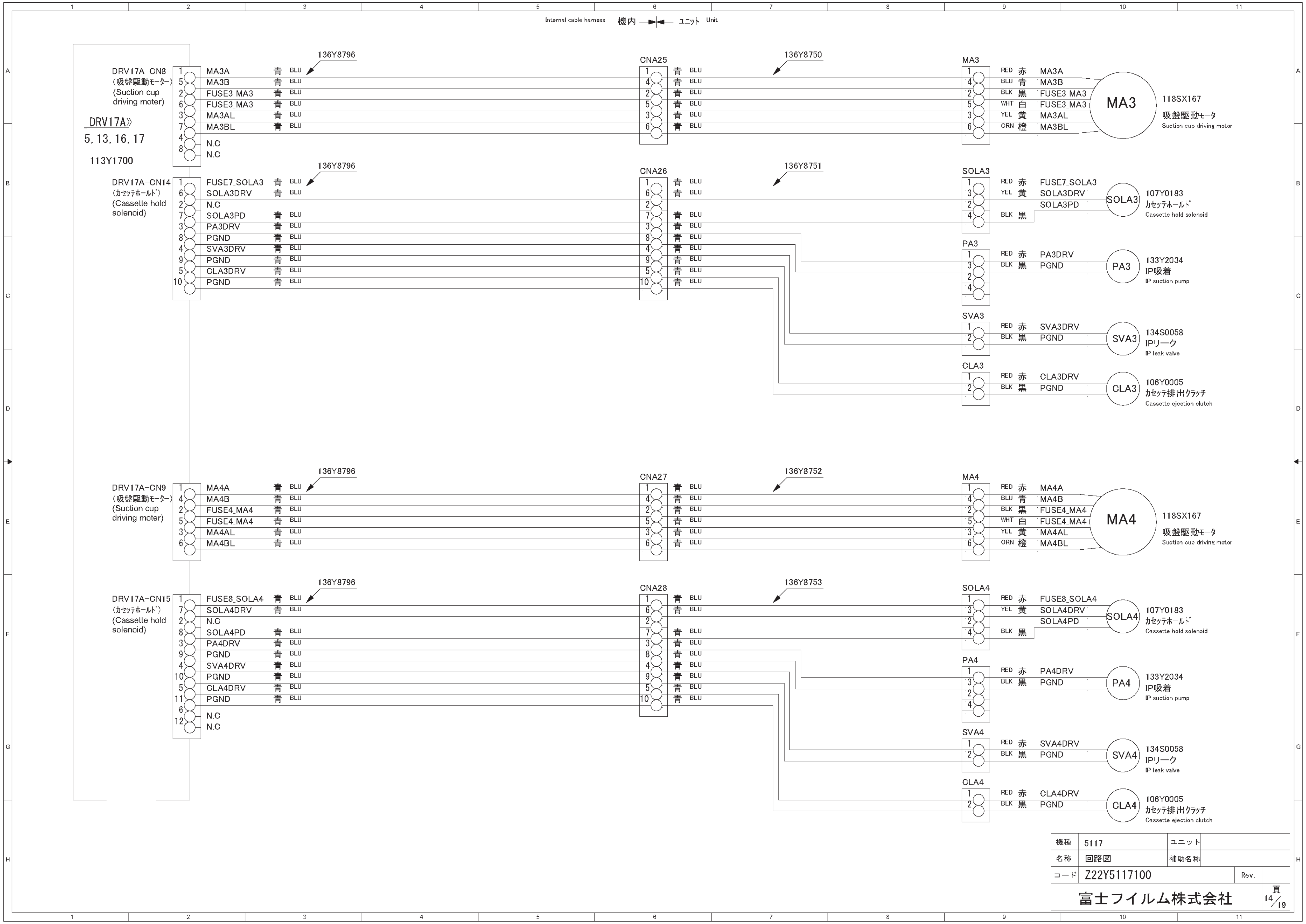
13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
DRV17A-CN8
(吸盤駆動モーター)
(Suction cup driving moter)
DRV17A》
5, 13, 16, 17
113Y1700
136Y8796
CNA25
136Y8750
MA3
MA3A
MA3B
FUSE3_MA3
FUSE3_MA3
MA3AL
MA3BL
N.C
青 BLU
RED 赤
BLU 青
BLK 黒
WHT 白
YEL 黄
ORN 橙
118SX167
吸盤駆動モータ
Suction cup driving motor
DRV17A-CN14
(カセッテホールド)
(Cassette hold solenoid)
CNA26
136Y8751
SOLA3
FUSE7_SOLA3
SOLA3DRV
SOLA3PD
PA3DRV
PGND
SVA3DRV
CLA3DRV
107Y0183
カセッテホールド
Cassette hold solenoid
PA3
133Y2034
IP吸着
IP suction pump
SVA3
134S0058
IPリーク
IP leak valve
CLA3
106Y0005
カセッテ排出クラッチ
Cassette ejection clutch
DRV17A-CN9
(吸盤駆動モーター)
(Suction cup driving moter)
CNA27
136Y8752
MA4
MA4A
MA4B
FUSE4_MA4
FUSE4_MA4
MA4AL
MA4BL
118SX167
吸盤駆動モータ
Suction cup driving motor
DRV17A-CN15
(カセッテホールド)
(Cassette hold solenoid)
CNA28
136Y8753
SOLA4
FUSE8_SOLA4
SOLA4DRV
SOLA4PD
PA4DRV
SVA4DRV
CLA4DRV
107Y0183
カセッテホールド
Cassette hold solenoid
PA4
133Y2034
IP吸着
IP suction pump
SVA4
134S0058
IPリーク
IP leak valve
CLA4
106Y0005
カセッテ排出クラッチ
Cassette ejection clutch
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
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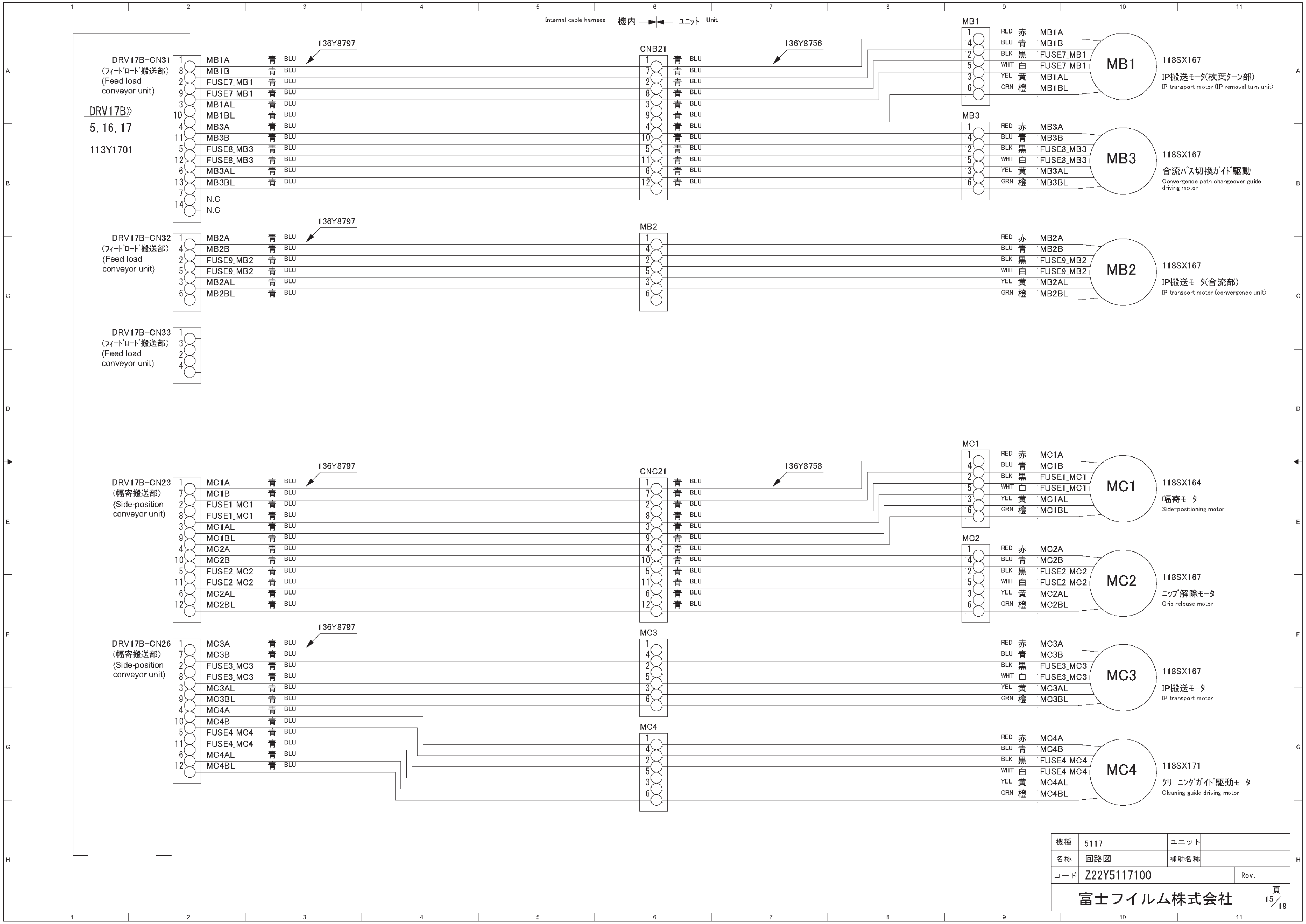
13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
DRV17B-CN31
(フィードロード搬送部)
(Feed load conveyor unit)
DRV17B》
5, 16, 17
113Y1701
136Y8797
CNB21
136Y8756
MB1
MB1A
MB1B
FUSE7_MB1
FUSE7_MB1
MB1AL
MB1BL
MB3A
MB3B
FUSE8_MB3
FUSE8_MB3
MB3AL
MB3BL
N.C
N.C
青 BLU
RED 赤
BLU 青
BLK 黒
WHT 白
YEL 黄
GRN 橙
MB1
118SX167
IP搬送モータ(枚葉ターン部)
IP transport motor (IP removal turn unit)
MB3
118SX167
合流パス切換ガイド駆動
Convergence path changeover guide driving motor
DRV17B-CN32
(フィードロード搬送部)
(Feed load conveyor unit)
MB2
MB2A
MB2B
FUSE9_MB2
FUSE9_MB2
MB2AL
MB2BL
118SX167
IP搬送モータ(合流部)
IP transport motor (convergence unit)
DRV17B-CN33
(フィードロード搬送部)
(Feed load conveyor unit)
DRV17B-CN23
(幅寄搬送部)
(Side-position conveyor unit)
CNC21
136Y8758
MC1
MC1A
MC1B
FUSE1_MC1
FUSE1_MC1
MC1AL
MC1BL
MC2A
MC2B
FUSE2_MC2
FUSE2_MC2
MC2AL
MC2BL
118SX164
幅寄モータ
Side-positioning motor
MC2
118SX167
ニップ解除モータ
Grip release motor
DRV17B-CN26
(幅寄搬送部)
(Side-position conveyor unit)
MC3
MC3A
MC3B
FUSE3_MC3
FUSE3_MC3
MC3AL
MC3BL
118SX167
IP搬送モータ
IP transport motor
MC4
MC4A
MC4B
FUSE4_MC4
FUSE4_MC4
MC4AL
MC4BL
118SX171
クリーニングガイド駆動モータ
Cleaning guide driving motor
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
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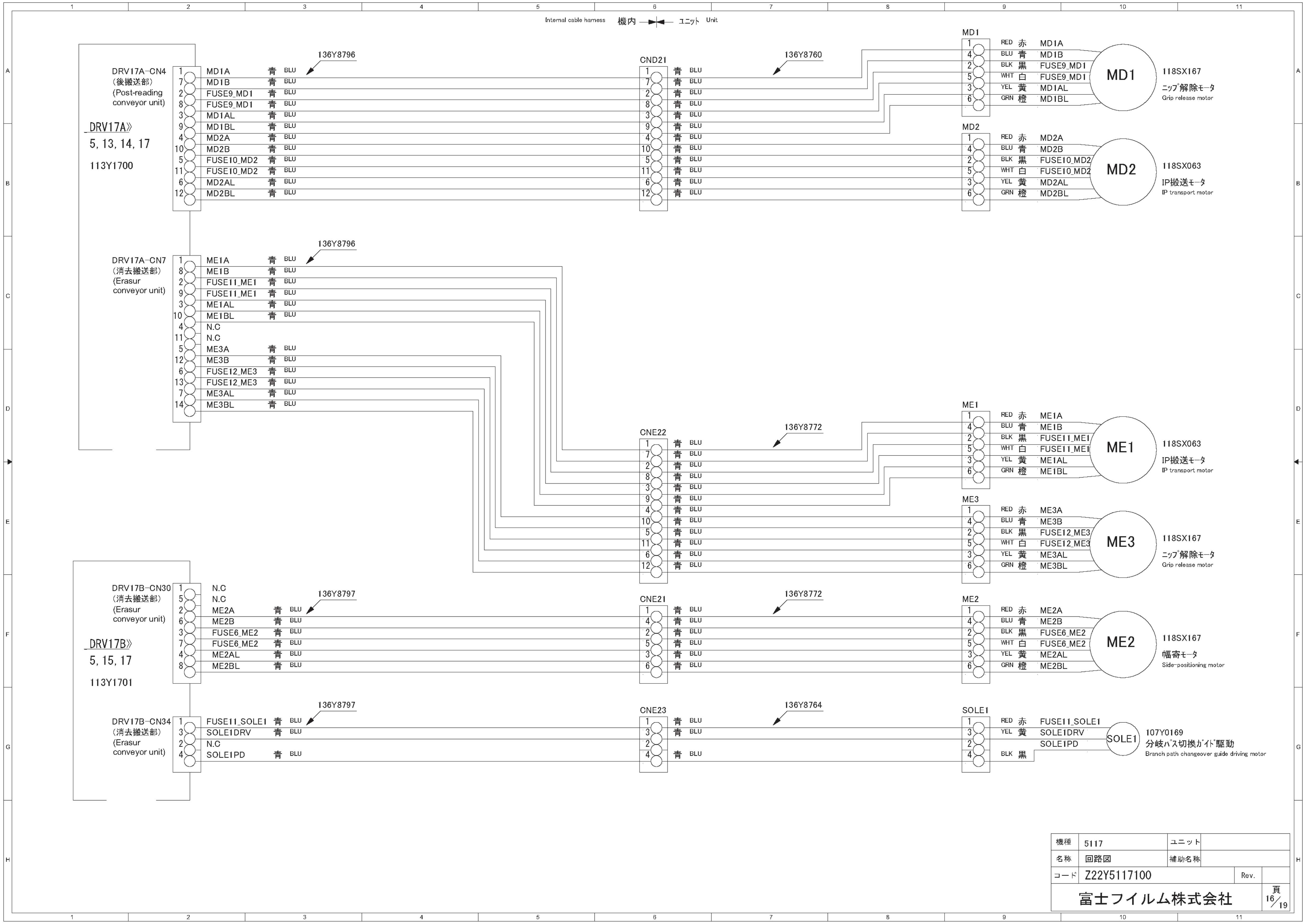
13B 回路図 2（#50001 以降） CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
DRV17A-CN4
（後搬送部）
(Post-reading conveyor unit)
DRV17A》
5, 13, 14, 17
113Y1700
MD1A
MD1B
FUSE9_MD1
MD1AL
MD1BL
MD2A
MD2B
FUSE10_MD2
MD2AL
MD2BL
青 BLU
136Y8796
CND21
136Y8760
MD1
RED 赤
BLU 青
BLK 黒
WHT 白
YEL 黄
GRN 橙
118SX167
ニップ解除モータ
Grip release motor
MD2
118SX063
IP搬送モータ
IP transport motor
DRV17A-CN7
（消去搬送部）
(Erasur conveyor unit)
ME1A
ME1B
FUSE11_ME1
ME1AL
ME1BL
N.C
ME3A
ME3B
FUSE12_ME3
ME3AL
ME3BL
CNE22
136Y8772
ME1
118SX063
IP搬送モータ
IP transport motor
ME3
118SX167
ニップ解除モータ
Grip release motor
DRV17B-CN30
（消去搬送部）
(Erasur conveyor unit)
DRV17B》
5, 15, 17
113Y1701
ME2A
ME2B
FUSE6_ME2
ME2AL
ME2BL
136Y8797
CNE21
136Y8772
ME2
118SX167
幅寄モータ
Side-positioning motor
DRV17B-CN34
（消去搬送部）
(Erasur conveyor unit)
FUSE11_SOLE1
SOLE1DRV
SOLE1PD
136Y8797
CNE23
136Y8764
SOLE1
107Y0169
分岐パス切換ガイド駆動
Branch path changeover guide driving motor
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
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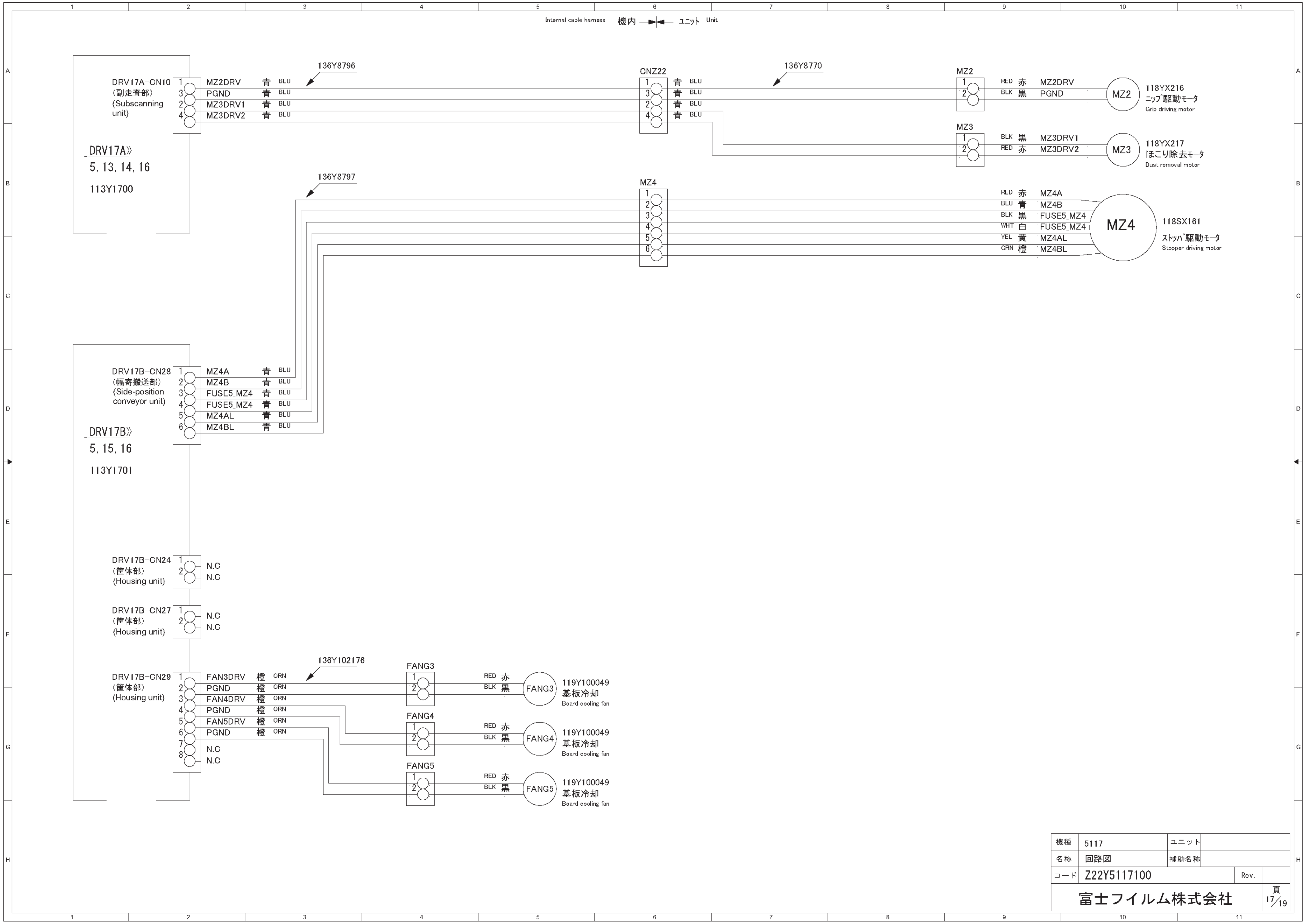
13B 回路図 2（#50001 以降） CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
DRV17A-CN10
(副走査部)
(Subscanning unit)
1 MZ2DRV 青 BLU
3 PGND 青 BLU
2 MZ3DRV1 青 BLU
4 MZ3DRV2 青 BLU
DRV17A》
5, 13, 14, 16
113Y1700
136Y8796
CNZ22
1 青 BLU
3 青 BLU
2 青 BLU
4 青 BLU
136Y8770
MZ2
1
2
RED 赤 MZ2DRV
BLK 黒 PGND
MZ2
118YX216
ニップ駆動モータ
Grip driving motor
MZ3
1
2
BLK 黒 MZ3DRV1
RED 赤 MZ3DRV2
MZ3
118YX217
ほこり除去モータ
Dust removal motor
136Y8797
MZ4
1
2
3
4
5
6
RED 赤 MZ4A
BLU 青 MZ4B
BLK 黒 FUSE5_MZ4
WHT 白 FUSE5_MZ4
YEL 黄 MZ4AL
GRN 橙 MZ4BL
MZ4
118SX161
ストッパ駆動モータ
Stopper driving motor
DRV17B-CN28
(幅寄搬送部)
(Side-position conveyor unit)
1 MZ4A 青 BLU
2 MZ4B 青 BLU
3 FUSE5_MZ4 青 BLU
4 FUSE5_MZ4 青 BLU
5 MZ4AL 青 BLU
6 MZ4BL 青 BLU
DRV17B》
5, 15, 16
113Y1701
DRV17B-CN24
(筐体部)
(Housing unit)
1 N.C
2 N.C
DRV17B-CN27
(筐体部)
(Housing unit)
1 N.C
2 N.C
DRV17B-CN29
(筐体部)
(Housing unit)
1 FAN3DRV 橙 ORN
2 PGND 橙 ORN
3 FAN4DRV 橙 ORN
4 PGND 橙 ORN
5 FAN5DRV 橙 ORN
6 PGND 橙 ORN
7 N.C
8 N.C
136Y102176
FANG3
1
2
RED 赤
BLK 黒
FANG3
119Y100049
基板冷却
Board cooling fan
FANG4
1
2
RED 赤
BLK 黒
FANG4
119Y100049
基板冷却
Board cooling fan
FANG5
1
2
RED 赤
BLK 黒
FANG5
119Y100049
基板冷却
Board cooling fan
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
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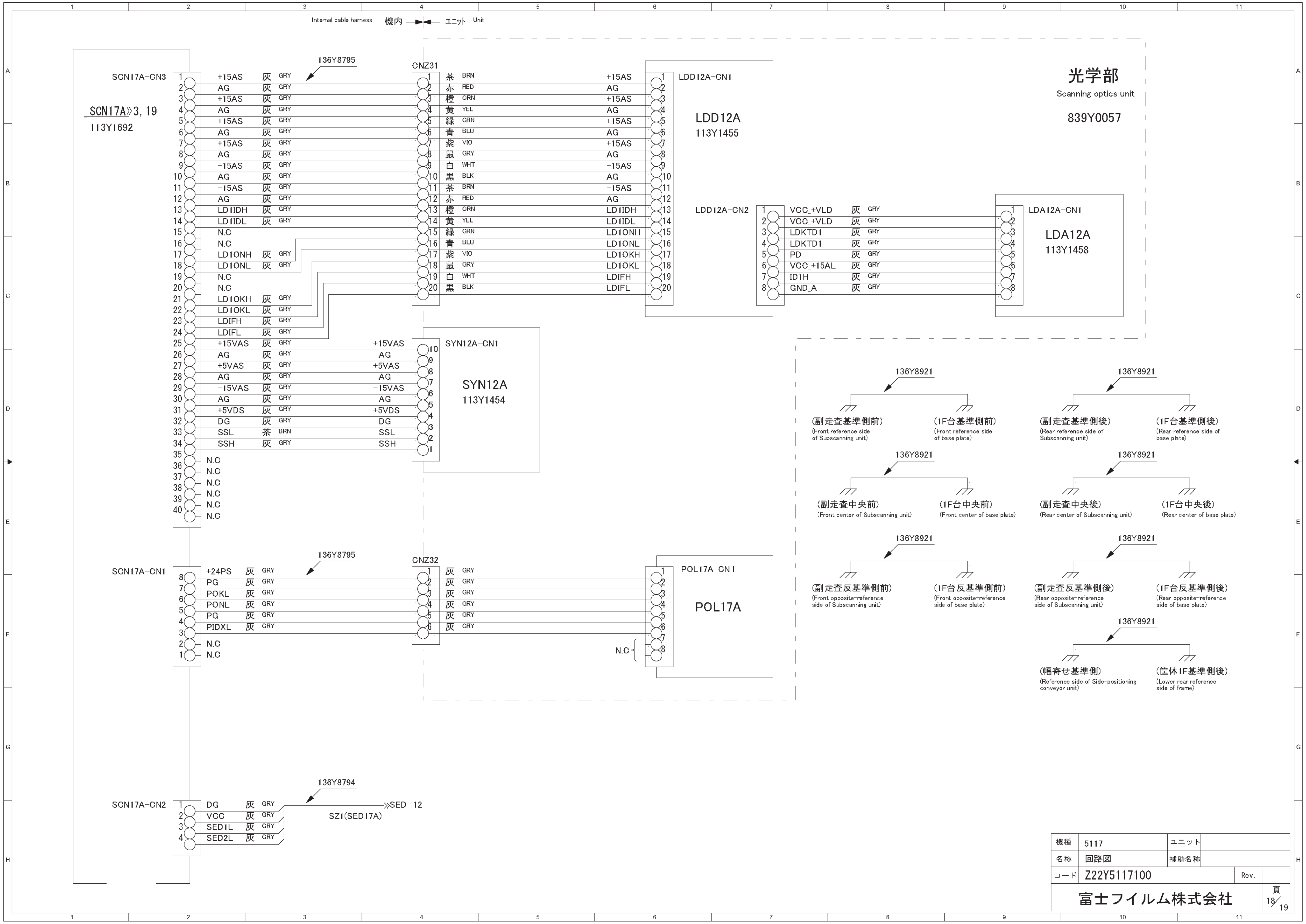
13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness 機内 ユニット Unit
光学部
Scanning optics unit
839Y0057
SCN17A-CN3
SCN17A》3, 19
113Y1692
136Y8795
CNZ31
+15AS 灰 GRY
AG 灰 GRY
-15AS 灰 GRY
LD1IDH
LD1IDL
N.C
LD1ONH
LD1ONL
LD1OKH
LD1OKL
LDIFH
LDIFL
+15VAS
+5VAS
-15VAS
+5VDS
DG
SSL 茶 BRN
SSH
茶 BRN
赤 RED
橙 ORN
黄 YEL
緑 GRN
青 BLU
紫 VIO
鼠 GRY
白 WHT
黒 BLK
LDD12A-CN1
LDD12A
113Y1455
LDD12A-CN2
VCC_+VLD
LDKTD1
PD
VCC_+15AL
ID1H
GND_A
LDA12A-CN1
LDA12A
113Y1458
SYN12A-CN1
SYN12A
113Y1454
SCN17A-CN1
136Y8795
CNZ32
+24PS
PG
POKL
PONL
PIDXL
POL17A-CN1
POL17A
N.C
SCN17A-CN2
136Y8794
VCC
SED1L
SED2L
》SED I2
SZ1(SED17A)
136Y8921
(副走査基準側前)
(Front reference side of Subscanning unit)
(1F台基準側前)
(Front reference side of base plate)
(副走査基準側後)
(Rear reference side of Subscanning unit)
(1F台基準側後)
(Rear reference side of base plate)
(副走査中央前)
(Front center of Subscanning unit)
(1F台中央前)
(Front center of base plate)
(副走査中央後)
(Rear center of Subscanning unit)
(1F台中央後)
(Rear center of base plate)
(副走査反基準側前)
(Front opposite-reference side of Subscanning unit)
(1F台反基準側前)
(Front opposite-reference side of base plate)
(副走査反基準側後)
(Rear opposite-reference side of Subscanning unit)
(1F台反基準側後)
(Rear opposite-reference side of base plate)
(幅寄せ基準側)
(Reference side of Side-positioning conveyor unit)
(筐体1F基準側後)
(Lower rear reference side of frame)
機種 5117
ユニット
名称 回路図
補助名称
コード Z22Y5117100
Rev.
富士フイルム株式会社
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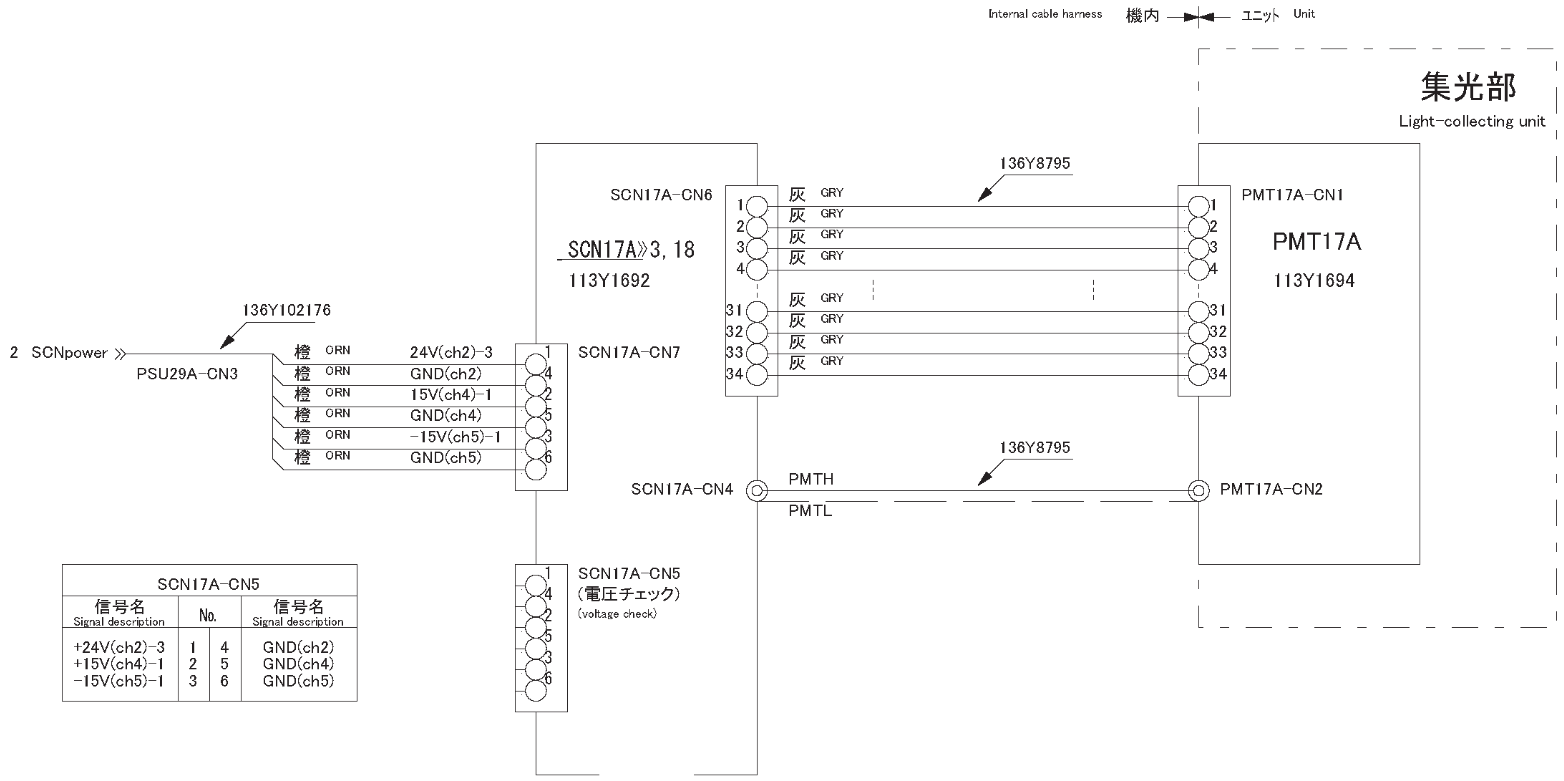
13B 回路図 2（#50001 以降）
CIRCUIT DIAGRAM 2 (#50001 or Later)


Internal cable harness
機内
ユニット
Unit
集光部
Light-collecting unit
136Y8795
SCN17A-CN6
SCN17A》3, 18
113Y1692
1
2
3
4
31
32
33
34
灰 GRY
PMT17A-CN1
PMT17A
113Y1694
136Y102176
2 SCNpower 》
PSU29A-CN3
橙 ORN
24V(ch2)-3
GND(ch2)
15V(ch4)-1
GND(ch4)
-15V(ch5)-1
GND(ch5)
SCN17A-CN7
SCN17A-CN4
PMTH
PMTL
PMT17A-CN2
SCN17A-CN5
(電圧チェック)
(voltage check)

SCN17A-CN5			
信号名 Signal description	No.		信号名 Signal description
+24V(ch2)-3	1	4	GND(ch2)
+15V(ch4)-1	2	5	GND(ch4)
-15V(ch5)-1	3	6	GND(ch5)

SCN17A-CN6 ←→ PMT17A-CN1			
信号名 Signal description	No.		信号名 Signal description
HVMONH	1	2	HVMONL
+15VOKH	3	4	+15VOKL
HVSH	5	6	HVSL
+15AS	7	8	AG
+15AS	9	10	AG
+15AS	11	12	AG
+15AS	13	14	AG
+15AS	15	16	AG
+15AS	17	18	AG
+15AS	19	20	AG
-15AS	21	22	AG
-15AS	23	24	AG
-15AS	25	26	AG
ERSH	27	28	ERSL
LEDSIGH	29	30	LEDSIGL
LEDONH	31	32	LEDONL
VIONH	33	34	VIONL

機種	5117	ユニット	
名称	回路図	補助名称	
コード	Z22Y5117100	Rev.	
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部品番号検索表
PARTS NOS. SEARCH TABLE

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106Y0005B/C	03F-1
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107Y0183/A	03G-18
109N0020C/D	07H-15
109N0021C/D	07H-14
109N100001A	07J-3
113Y100415A	02C-24
113Y100416B	11B-16
113Y1466	02B-6.1
113Y1466	02B-8.1
113Y1466	04C-10.1
113Y1466	04C-19.1
113Y1466	04C-20.1
113Y1466	05B-1.1
113Y1466	06B-16.1
113Y1466	07E-2.1
113Y1466	07E-3.1
113Y1677L	11A-12
113Y1677L	11B-12
113Y1680G	11A-13
113Y1680G	11B-13
113Y1692C	11A-17
113Y1692C	11B-17
113Y1694D/E	09-1.1
113Y1696C/D	10F-6.1
113Y1698F	11A-18
113Y1698F	11B-18
113Y1699B	11A-16
113Y1700C	11A-14
113Y1700C	11B-14
113Y1701C	11A-15
113Y1701C	11B-15
113Y1702C	01A-9
113Y1702C	01C-9
113Y1702C	03A-18
113Y1702C	03B-18
113Y1737G	09-1.2
113Y1738D	10F-6.2
113Y1756G	07J-2
115S0153/A	07I-1
115Y0035B	07I-2
115Y0047B	07J-6
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118SX063/A	07A-1

Part No.	INDEX No.-Drawing No
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118SX164/A	05F-1
118SX167/A	03F-2
118SX167/A	04B-5
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118SX167/A	05B-2
118SX167/A	05C-1
118SX167/A	06B-11
118SX167/A	07C-1
118SX167/A	07C-2
118SX171/B/C/D	05A-7
118YX216C/B/D	10D-1
118YX217D	10F-4
118YX251C	10B-1
119S0006/A/B	07H-1
119S0006/A/B	07H-17
119S0006/A/B	11A-5
119S0006/A/B	11A-19.1
119S0006/A/B	11B-19.1
119S0008/A/B	02B-16
119S0008/A/B	07H-2
119Y100049	11A-19.2
119Y100049	11B-19.2
120N100014	02C-17
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120Y0091A	12-1
123N0007D	07I-3
125N0124G/H	02B-11
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125Y100037	02C-23
128N0067/A	02B-12
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128Y0331	03D-1
133Y1031A/B	03C-2
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136Y102174B	12-76
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136Y102188E	12-75
136Y102192B	12-70
136Y102193B	12-71
136Y102194B	12-72
136Y102195B	12-73
136Y8545A	12-11
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136Y8738D	12-13
136Y8739E/F	12-14
136Y8740C	12-15
136Y8741E/F	12-16
136Y8742C	12-17
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136Y8744B	12-19
136Y8745C	12-20
136Y8746C	12-21
136Y8747C	12-22
136Y8748C	12-23
136Y8749C	12-24
136Y8750C	12-25
136Y8751C	12-26
136Y8752C	12-27
136Y8753C	12-28
136Y8754C	12-29
136Y8755D	12-30
136Y8756B	12-31
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136Y8766C	12-39
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136Y8786C	12-57
136Y8787D	12-58
136Y8788C	12-59
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137S1175	07H-22.1
137S1178	07H-19
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137S1276	02B-18
137S1276	11A-29
137S1276	11A-31
137S1276	11B-29
137S1276	11B-31
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137S1278	11A-28
137S1278	11A-30
137S1278	11B-24
137S1278	11B-26
137S1278	11B-28
137S1278	11B-30
137S1279	11A-23
137S1279	11B-23
137S1280	07J-4
137S1458	07H-20.2
137S1458	07H-22.2
138Y0013	11A-38
138Y0014	11A-39
139N0068	11A-32
139N0068	11B-32
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146N0016B	02B-8.2
146N0016B	02C-6
146N0016B	02C-8
146N0016B	04C-10.2
146N0016B	04C-19.2
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360N0476	05D-20
360N0476	06D-5
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360N0479	05D-21
360N0479	05D-22
360N0479	06D-6
360N0479	06D-20
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384N0082	03E-19
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387N0131B/C	02C-9
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387N0168	04D-10
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387N100001	10F-3
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388N1213A	04A-9
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388N2517	04F-8
388N2517	04F-14
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388N2517	04G-17
388N2518	04E-1
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388N2524A	06E-10
388N2524A	07F-6
388N2525	06A-15
388N2526	10E-8
388N2526	10E-10
388N2527A	10E-9
388N2527A	10E-11
388N2531A	07D-16
388N2532A	07D-17
388N2536A	05D-24
388N2537A	05D-25
388N2537A	05D-26
388N2540	07E-6
388N2540	07E-17
388N2545	07A-18
388N2546	05D-3
388N2549	07D-3
388N2551	07D-23
388N2552	07D-24
388N2552	07D-25
388N3081B	03A-14
388N3081B	03B-14
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392N0009A	03E-16
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398N0067C	03B-15
401N0848B/C	10G-2
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405N0186	03B-16
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405N0186	05F-28
405N0186	06E-8
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405N101760	01C-24
405N2505/A	01B-7
405N2505A	02B-21
405N2505A	02C-21
405N3060A	01A-25
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603Y0090	01C-12
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Part No.	INDEX No.-Drawing No

Part No.	INDEX No.-Drawing No

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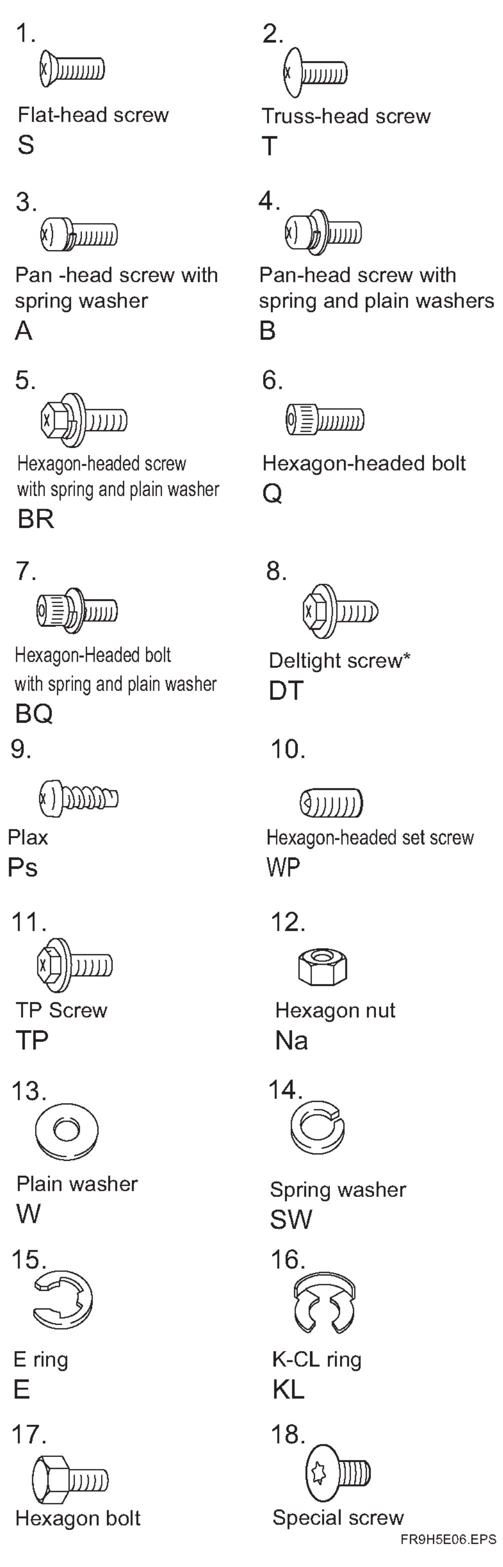
ネジ・座金類の表示記号一覧表
TABLE OF SCREWS / WASHERS INDICATION SYMBOLS

Table of Screws/Washers Indication Symbols

No.	Part name	Indication Symbols	Symbol in the dissassembly chart (example)	Size	Shape
1	Cross-recessed flat-head screw	S	S3 × 10	M3 × 10	 1. Flat-head screw S 2. Truss-head screw T 3. Pan -head screw with spring washer A 4. Pan-head screw with spring and plain washers B 5. Hexagon-headed screw with spring and plain washer BR 6. Hexagon-headed bolt Q 7. Hexagon-Headed bolt with spring and plain washer BQ 8. Deltight screw* DT 9. Plax Ps 10. Hexagon-headed set screw WP 11. TP Screw TP 12. Hexagon nut Na 13. Plain washer W 14. Spring washer SW 15. E ring E 16. K-CL ring KL 17. Hexagon bolt 18. Special screw FR9H5E06.EPS
2	Cross-recessed truss-head screw	T	**T4 × 8	M4 × 8 M4 × 10	
3	Cross-recessed pan-head screw with spring washer	A	M2.6 × 16	M2.6 × 16	
4	Cross-recessed pan-head screw with spring and plain washers	B	B3 × 6	M3 × 6 M3 × 30 M3 × 35	
5	Cross-recessed hexagonheaded screw with spring and plain washers	BR	BR3 × 10 （308S9420310） BR3 × 12 （308S9420312） BR4 × 8 （308S9410408）	M3 × 10 M3 × 12 M4 × 8 M4 × 12 M8 × 30	
6	Hexagon-headed bolt	Q	Q3 × 20	M3 × 20	
7	Hexagon-Headed bolt with spring and plain washer	BQ	BQ4 × 10	M4 × 10	
8	Deltight screw*	DT	*DT3 × 6 （308S0254）	M3 × 6 M4 × 8	
9	Plax**	Ps	**Ps3 × 6	Nominal diameter 3 × 6	
10	Hexagon-headed setscrew (double-point)	WP	WP4 × 6	M3 × 5 M4 × 6 M4 × 8	
11	TPscrew	TP	TP3 × 6 （308S0311）	M3 × 6 M4 × 8	
12	Hexagon nut	Na	Na20	M16 M20	
13	Plain washer	W	W4	M4	
14	Spring washer	SW	SW3	M3	
15	E ring	E	E6	Nominal diameter 4 Nominal diameter 6	
16	K-CL ring	KL	KL4（315N0009） KL6（315N0010）	M4 M6	
17	Hexagon bolt		**M12 × 24	M8 × 30 M12 × 24 M12 × 30	
18	Special screw		Special screw		

* : Self-tapping screw with a noncircular end

** : Stainless-made

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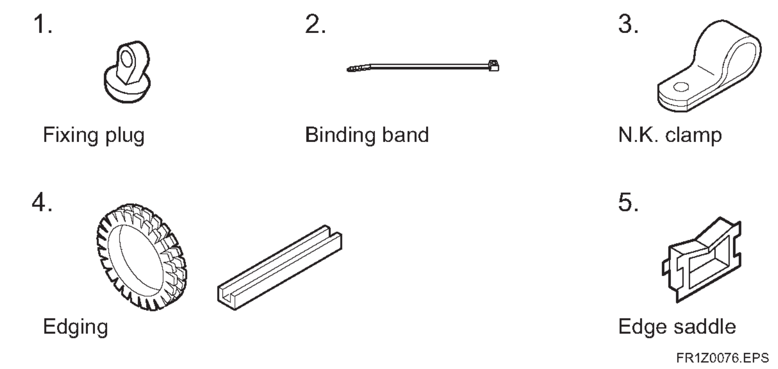
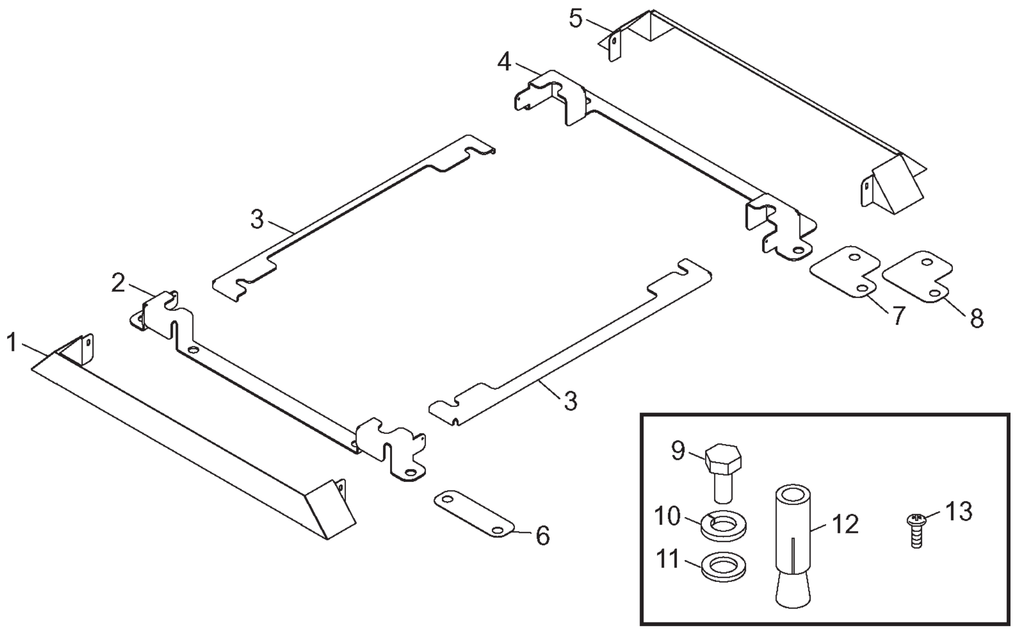
消耗品一覧表
LIST OF QUICK WEARING PARTS

List Of Quick Wearing Parts

No.	Part name	Shape
1	Fixing plug	 1. Fixing plug 2. Binding band 3. N.K. clamp 4. Edging 5. Edge saddle FR1Z0076.EPS
2	Binding band	
3	N.K. clamp	
4	Edging	
5	Edge saddle	

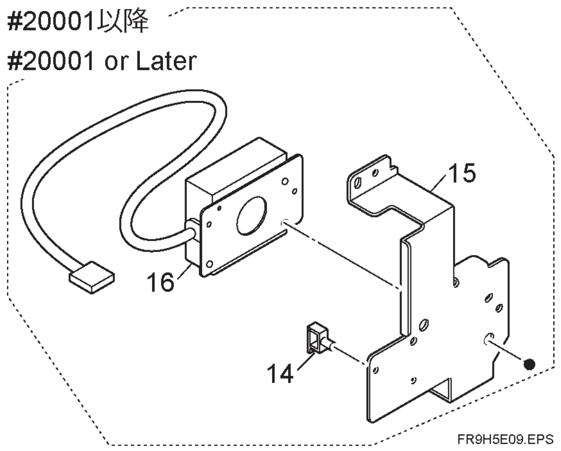
17 オプション OPTION

■ オプション 1 ／ Option 1

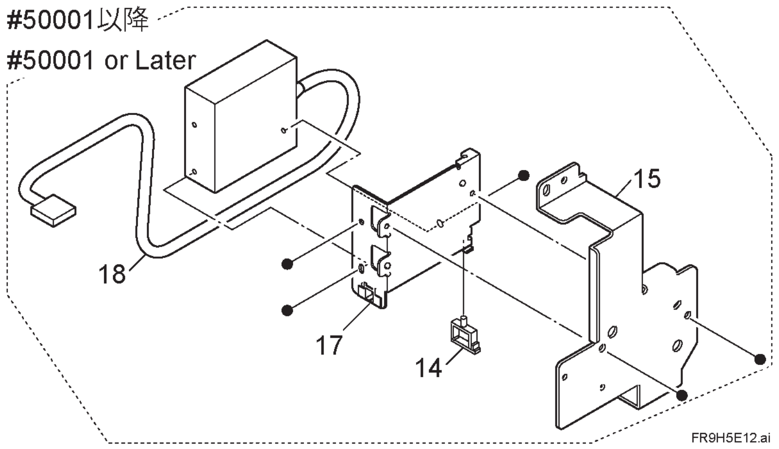


FR9H5E10.EPS

■ オプション 2 ／ Option 2



FR9H5E09.EPS



FR9H5E12.ai

オプション OPTION 17

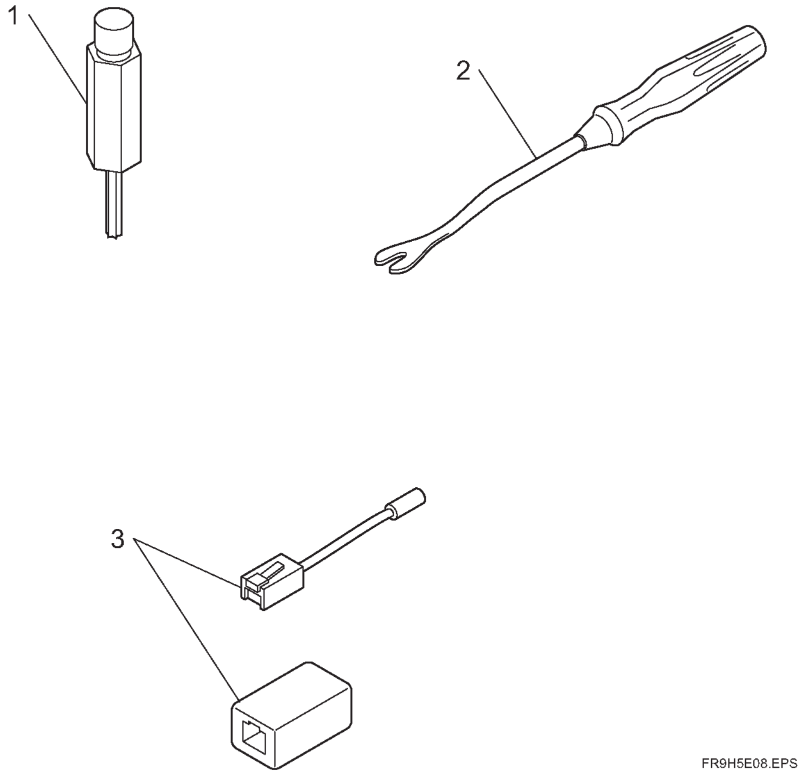
■ オプション 1 ／ Option 1

RANK	REF.	PART NO.	PART NAME.		QTY	REMARKS	SERIAL NO.	REFER TO
E	1	350N2873/A	カバー	Cover	1	Front cover		–
E	2	356N9407	ブラケット	Bracket	1	Front		–
E	3	356N9406A	ブラケット	Bracket	2			–
E	4	356N9534	ブラケット	Bracket	1	Rear		–
E	5	350N2874A/B	カバー	Cover	1	Rear cover		–
E	6	347N1930	スペーサ	Spacer	12	2mm		–
E	7	347N1929	スペーサ	Spacer	2	1mm	#20001 or later	–
E	8	347N1928	スペーサ	Spacer	12	2mm		–
D	9	304S1001225	ボルト	Bolt	8	12x20		–
D	10	309S0220012	バネ座金	Spring washer	8	SW12		–
D	11	309S0120012	平座金	Plain washer	8	W12		–
D	12	305S0061B	アンカーナット	Anchor nut	8	Na12		–
D	13	301S3000408	トラスネジ	Truss screw	4	T3x6		–

■ オプション 2 ／ Option 2

RANK	REF.	PART NO.	PART NAME.		QTY	REMARKS	SERIAL NO.	REFER TO
D	14	318S1164	ブッシュ	Clump	1			–
E	15	356N9388A	ブラケット	Bracket	1		#20001 or later	☞{MC:5.12}
D	16	852Y0074/A/B	読取部	Bar Code Reader	4	BCRA1, 2, 3, 4	#20001 or later	☞{MC:5.12}
E	17	356N103848A	ブラケット	Bracket	7		#50001 or later	☞{MC:5.12}
D	18	852N100004A	読取部	Bar Code Reader	4	BCRA1, 2, 3, 4	#50001 or later	☞{MC:5.12}
E	19	817Y0017	リモート電源キット	Remote Power Kit	1			–

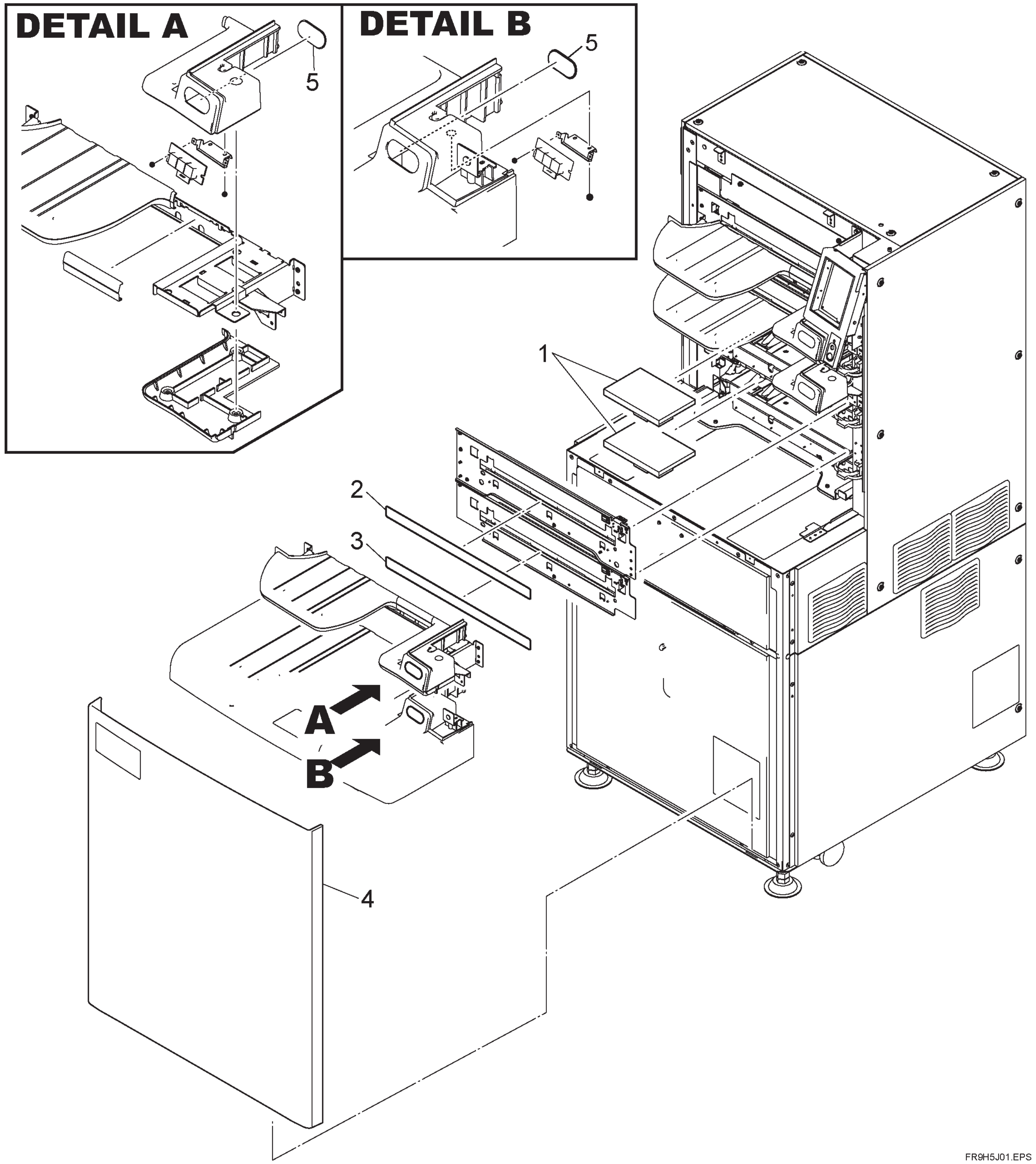
18 治具 JIG



治具
JIG
18

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	Y22S0114	特殊ビット	Special bit	1			☞{MC:21.}
E	2	Y22S0115	クリップクランプツール	Clip clamping tool	1			☞{MC:21.}
E	3	898Y0981	ループケーブル	Loop cable	1			☞{MC:21.}

19 XG2000



FR9H5J01.EPS

RANK	REF.	PART NO.	PART NAME		QTY.	REMARKS	SERIAL NO.	REFER TO
E	1	386N100108	緩衝機材	Shock Absorber	2	For XG2000		–
E	2	350N100576	カバー	Cover	1	For XG2000		☞{MC:24.1}
E	3	350N100576	カバー	Cover	1	For XG2000		☞{MC:24.2}
E	4.1	350Y100542	カバー	Cover	1	For XG2000	#20001 or later	☞{MC:3.1}
E	4.2	350Y101287	カバー	Cover	1	For XG2000	#50001 or later	☞{MC:3.1}
A	5	603Y100016	フィルタ	Filter	2	For XG2000		–
E	6	898Y100151	キット	Kit	1	Upgrade Kit		☞{IN:Appx6.}

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CR-IR 362 Service Manual

Preventive Maintenance (PM)

Control Sheet

Issue date	Revision number	Reason	Pages affected
08.25.2003	01	New release (FM4098)	All pages
10.10.2003	02	Corrections (FM4160)	1
02.20.2004	03	Corrections (FM4181)	1-4, 6, 8-10, 86
11.15.2004	04	Corrections (FM4425)	2, 3, 9-15, 24, 30-37, 39-123
02.19.2007	07	Change of document number (FM5097)	All pages
09.30.2008	08	Corrections (FM5340)	2, 4, 24-123
09.30.2009	09E	Revision (FM5539)	2-4, 12, 15, 16, 19-115

1. Preventive Maintenance Program

1.1 How To Use the Preventive Maintenance Volume

- Perform the relevant procedures in accordance with the interval notations (**1Y** **2Y** **3Y**).
- "Preventive Maintenance Program List" is comprised of programs classified by intervals of one year (1Y), two years (2Y), and three years (3Y). Since the maintenance programs differ depending upon the respective intervals, they should be performed according to the Program List.
- When performing any preventive maintenance program, proceed to the next program in accordance with the "Reference section" described for each maintenance program.

  - Example -

  After performing the procedures described in "6. Turning OFF the High-Voltage Switch", the maintenance programs to be done next differ depending upon the respective intervals, as follows:

  1 year intervals: **1Y** ☞ **{PM:8.4.1}**

  2 year intervals: **2Y** ☞ **{PM:7.1}**

  3 year intervals: **3Y** ☞ **{PM:8.4.1}**

  ◇ *REFERENCE* ◇

  ☞ *{PM:6._Turning OFF the High-Voltage Switch}*

1.2 Notations of Intervals

In this volume, either of the following symbols is indicated for each maintenance program.
Before initiating any maintenance operation, you should become familiar with the following symbols.

1Y : Indicates a preventive maintenance program that must be performed every year of machine use or whenever a process count of about 60,000 is reached.

2Y : Indicates a preventive maintenance program that must be performed every two years of machine use or whenever a process count of about 120,000 is reached.

3Y : Indicates a preventive maintenance program that must be performed every three years of machine use or whenever a process count of about 180,000 is reached.

◇ *REFERENCE* ◇

The above process counts are based on a maximum daily process count of 300.

1.3 Preventive Maintenance Program List

◆ ***INSTRUCTION*** ◆

Safety provided by grounding is assured by properly establishing power cable and additional protective ground wire connections and securing the parts with retaining screws. To maintain safety, ensure that the parts and retaining screws removed for servicing purposes are restored to states existing upon installation. After the parts and retaining screws are restored to the above-mentioned states, follow the procedures set forth in this service manual to verify that the retaining screws are securely tightened to properly secure the parts.

Perform the specified preventive maintenance programs at the predefined intervals or when the predefined process count is reached.
The preventive maintenance programs to be performed at various intervals are listed below.

● Preventive maintenance programs to be performed every year of machine use or whenever a process count of about 60,000 is reached (1Y)

Reference section	Maintenance program	Time requirements	Periodic replacement parts	Remarks
2.1	Checking the Error Log	1		
3	Checking the Image/ Conveyance	15		
4	Pulling Out the Machine	1		
5.1	Removing the Covers (1 or 3 Year Intervals)	2		
8	Checking the Feed/Load Conveyor Unit	4		
8.4.1	Cleaning the Brush Roller	-		
13.1	Removing the Lamp Assembly	10		
14	Checking Lamp Assembly	-		
14.1	Cleaning/Replacing the Lamps	-		#20001 or later
14.2	Cleaning the Filter	-		#20001 or later
14.4	Cleaning the Filter	-		#50001 or later
17	Cleaning/Reinstalling the Covers and Louvers	2		
18	Cleaning/Replacing the Air Filter	3		#20001 or later
19	Securing the Machine	1		
20	Checking the Image/ Conveyance	15		
21	Checking the Error Log	1		

Preventive maintenance programs to be performed every two years of machine use or whenever a process count of about 120,000 is reached (2Y)

Reference section	Maintenance program	Time requirements	Periodic replacement parts	Remarks
2.1	Checking Error Log	1		
3	Checking the Image/ Conveyance	15		
4	Pulling Out the Machine	1		
5.3	Removing the Covers (2 Year Intervals)	7		
6	Turning OFF the High-Voltage Switch	1		
7	Checking the Cassette Set Unit	15		Cleaning the rubber rollers and suction cups
8	Checking the Feed/Load Conveyor Unit	45		
8.1, 8.2, 8.3	Cleaning the Shock Absorbing Rollers, Guides, and Rubber Rollers	-		
8.4.2	Cleaning/Replacing the Brush Roller	4	Brush rollers (x2)	
9	Checking the Side-Positioning Conveyor Unit	10		
9.2	Cleaning the Guide	-		
9.3.2	Cleaning the Cleaning Guide Assembly (2 Year Intervals)	-		
10	Checking the Post-Reading Conveyor Unit	8		
10.2	Removing the Post-Reading Conveyor Unit (For CR-IR 362)	-		
10.4	Cleaning the Guides, Shock Absorbing Rollers, and Rubber Rollers	-		
10.5	Cleaning the Movable Guide Assembly	-		
11	Checking the Subscanning Unit	30		
11.2	Cleaning the Antistatic Brush Assembly	-		
11.8	Cleaning the Flywheel and Kapton® Belt	-		
11.9	Cleaning the SUS Belt	-		
12	Checking the Light-Collecting Guide	10		
12.2	Reinstalling the Post-Reading Conveyor Unit (For CR-IR 362)	-		
13	Checking the Erasure Conveyor Unit	40		
13.1	Removing the Lamp Assembly	-		
13.3	Cleaning the IP Switchback Assembly	-		
13.4	Cleaning the Reflection Plate Guide and Rubber Rollers	-		
13.5	Cleaning the Shock-Absorbing Roller and Guide	-		
13.7	Cleaning the Rubber Roller and Guide	-		
14	Checking Lamp Assembly	10		
14.1	Cleaning/Replacing the Lamps	-	Lamps (x5)	- It is presumed that the erasure lamps were lit for 1,800 h. - #20001 or later
14.2	Cleaning the Filter	-		#20001 or later
14.4	Cleaning the Filter	-		#50001 or later
15	Cleaning Inside the Machine	3		
16	Turning ON the High-Voltage Switch	1		
17	Cleaning/Reinstalling the Covers and Louvers	10		
18	Cleaning/Replacing the Air Filter	3	Filter (x1)	#20001 or later
19	Securing the Machine	1		
20	Checking the Image/ Conveyance	15		
21	Checking Error Log	1		
22	Resetting the Erasure Lamp Lighting Time	1		

Parts to be replaced every two years of machine use or whenever a process count of about 120,000 is reached

Reference section	Parts Name	Parts No.	Qty.	Remarks
8.4.2	Cleaning roller	334N5015B	2	
14.1	Lamp	123N0007	5	
18	Air filter	376N0234	1	#20001 or later

● Preventive maintenance programs to be performed every three years of machine use or whenever a process count of about 180,000 is reached (3Y)

Reference section	Maintenance program	Time requirements	Periodic replacement parts	Remarks
2.1	Checking Error Log	1		
3	Checking the Image/ Conveyance	15		
4	Pulling Out the Machine	1		
5.1	Removing the Covers (1 or 3 Year Intervals)	2		#20001 or later
5.4	Removing the Covers (3 Year Intervals : #50001 or later)	2		#50001 or later
6	Turning OFF the High-Voltage Switch	1		
7.3	Replacing the IP Suction Pumps (#50001 or Later)	15	Pump (x4)	#50001 or later *1
8	Checking the Feed/Load Conveyor Unit	4		
8.4.1	Cleaning the Brush Roller	-		#20001 or later
8.4.2	Cleaning the Brush Roller	-		#50001 or later
9	Checking the Side-Positioning Conveyor Unit			
13.1	Removing the Lamp Assembly	-		
14	Checking Lamp Assembly	10		
14.1	Cleaning/Replacing the Lamps	-		#20001 or later
14.3	Replacing the Filter	-	Filter (x1)	#20001 or later
14.5	Replacing the Lamp Assembly	-		#50001 or later
14.6	Reinstalling the Lamp Assembly	-		
16	Turning ON the High-Voltage Switch	1		
17	Cleaning/Reinstalling the Covers and Louvers	4		
18	Cleaning/Replacing the Air Filter	3		#20001 or later
19	Securing the Machine	1		
20	Checking the Image/ Conveyance	15		
21	Checking Error Log	1		
23	Reset the number that the pumps are used	1		

*1: Replace the IP suction pumps when either one of the following conditions is met.

- Every three years
- When process count reaches the number set in CONDITION OF PUMP LIFE under EDIT CONFIGURATION.
  When CONDITION OF PUMP LIFE is set to "NO DISP", 180,000 process counts is the condition. In other cases, the set number of the process count is the condition.

● Parts to be replaced every three years of machine use or whenever a process count of about 180,000 is reached

Reference section	Parts Name	Parts No.	Qty.	Remarks
7.3	Pump	133Y2034	4	Pump
14.3	Filter	603Y0066	1	Erasure filter
14.5	Lamp case (Lamp Assembly)	840Y100201	1	Lamp case (Lamp Assembly)

1.4 Preventive Maintenance Flow

START

- ☐ 2. Details of Maintenance Procedures
- ☐ 3. Checking the Image/Conveyance
- ☐ 4. Pulling Out the Machine
- ☐ 5. Removing the Covers
- ☐ 6. Turning OFF the High-Voltage Switch
- ☐ 7. Cassette Set Unit
- ☐ 8. Feed/Load Conveyor Unit
- ☐ 9. Side-Positioning Conveyor Unit
- ☐ 10. Post-Reading Conveyor Unit
- ☐ 11. Subscanning Unit
- ☐ 12. Light-Collecting Guide
- ☐ 13. Erasure Conveyor Unit
- ☐ 14. Lamp Assembly
- ☐ 15. Cleaning Inside the Machine

Ⓐ

Ⓐ

- ☐ 16. Turning ON the High-Voltage Switch
- ☐ 17. Cleaning/Reinstalling the Covers and Louvers
- ☐ 18. Cleaning/Replacing the Air Filter
- ☐ 19. Securing the Machine
- ☐ 20. Checking the Image/Conveyance
- ☐ 21. Checking Error Log
- ☐ 22. Resetting the Erasure Lamp Lighting Time

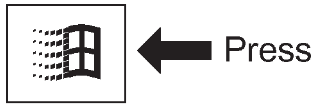
END

2. Details of Maintenance Procedures

2.1 Checking the Error Log

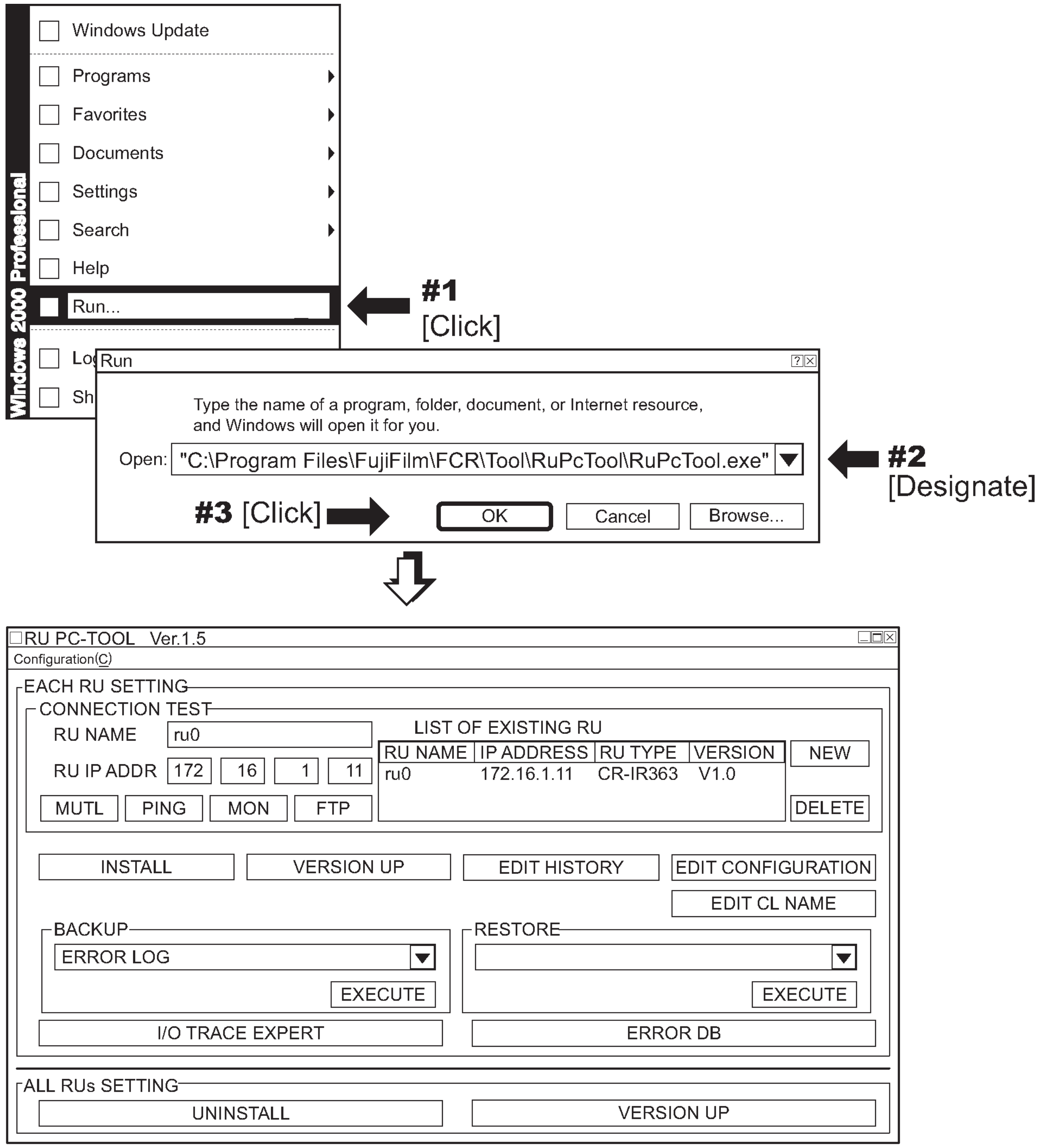
1Y 2Y 3Y

1. **Power ON the CL.**
2. **Power ON the RU.**
3. **Press the [Windows] key to display the Start menu of Windows.**



FR9H6012.EPS

4. **Select [Run...] from the Start menu of Windows,,and type ["C:\Program Files\FujiFilm\FCR\Tool\RuSel\RuSel.exe"] to open the RU MAINTENANCE UTILITY window.**


Windows 2000 Professional
Windows Update
Programs
Favorites
Documents
Settings
Search
Help
Run...
Lo
Sh
#1
[Click]
Run
Open:
#2
[Designate]
#3 [Click]
OK
Cancel
Browse...
RU PC-TOOL Ver.1.5
Configuration(C)
EACH RU SETTING
CONNECTION TEST
LIST OF EXISTING RU
NEW
DELETE
MUTL
PING
MON
FTP
INSTALL
VERSION UP
EDIT HISTORY
EDIT CONFIGURATION
EDIT CL NAME
BACKUP
RESTORE
EXECUTE
EXECUTE
I/O TRACE EXPERT
ERROR DB
ALL RUs SETTING
UNINSTALL
VERSION UP

Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open: "C:\Program Files\FujiFilm\FCR\Tool\RuPcTool\RuPcTool.exe"

RU NAME: ru0

RU IP ADDR: 172 16 1 11

RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.11	CR-IR363	V1.0

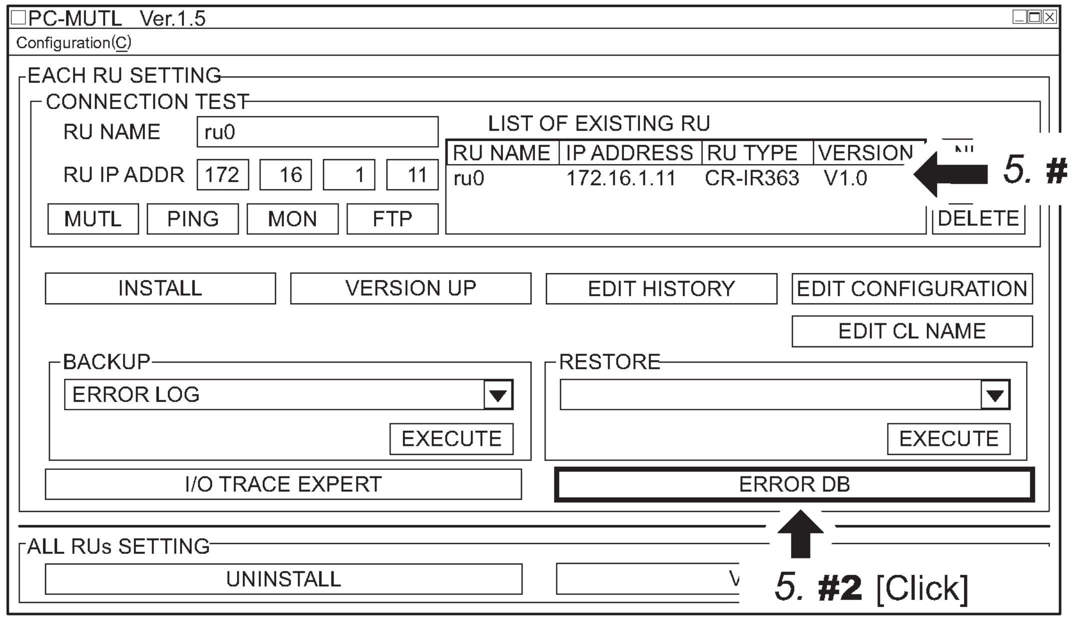
BACKUP: ERROR LOG

FR9H6101.EPS

5. **Open the ERROR-DB.**

6. **Select the log to check the error log.**

MAINTENANCE UTILITY window


PC-MUTL Ver.1.5
Configuration(C)
EACH RU SETTING
CONNECTION TEST
LIST OF EXISTING RU
MUTL
PING
MON
FTP
DELETE
INSTALL
VERSION UP
EDIT HISTORY
EDIT CONFIGURATION
EDIT CL NAME
BACKUP
RESTORE
EXECUTE
EXECUTE
I/O TRACE EXPERT
ERROR DB
ALL RUs SETTING
UNINSTALL

RU NAME ru0

RU IP ADDR 172 16 1 11

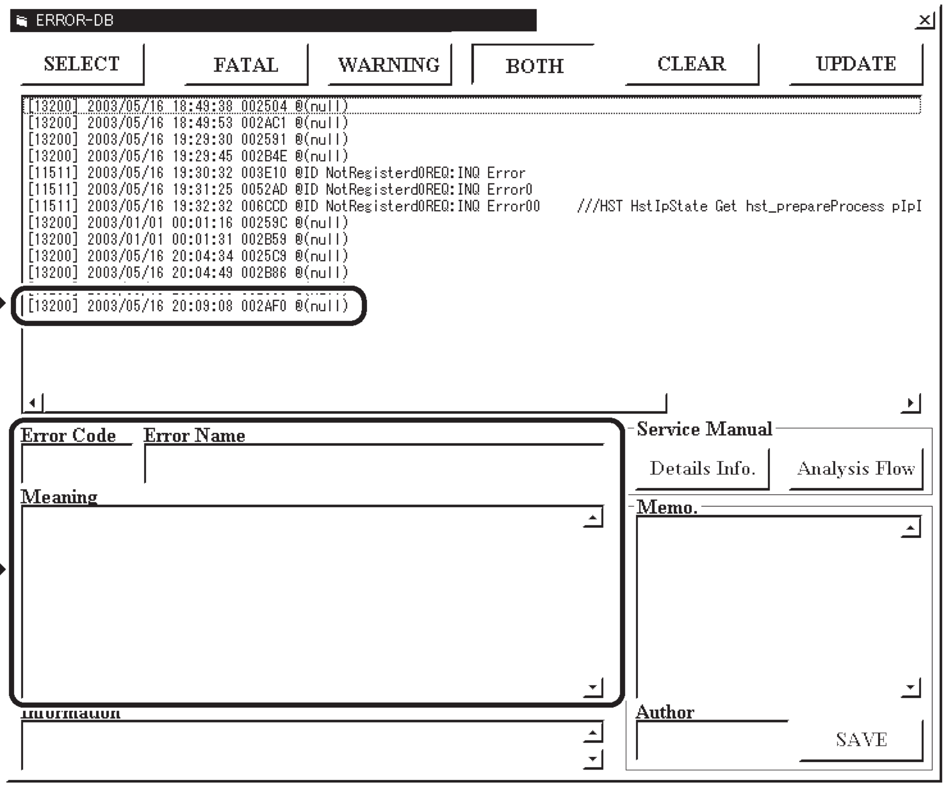
RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.11	CR-IR363	V1.0

BACKUP: ERROR LOG

5. **#1** [Select/Click]

5. **#2** [Click]

ERROR-DB window


ERROR-DB
SELECT
FATAL
WARNING
BOTH
CLEAR
UPDATE
Error Code
Error Name
Meaning
Information
Service Manual
Details Info.
Analysis Flow
Memo.
Author
SAVE

```
[13200] 2003/05/16 18:49:38 002504 @(null)
[13200] 2003/05/16 18:49:53 002AC1 @(null)
[13200] 2003/05/16 19:29:30 002591 @(null)
[13200] 2003/05/16 19:29:45 002B4E @(null)
[11511] 2003/05/16 19:30:32 003E10 @ID NotRegisterd0REQ:INQ Error
[11511] 2003/05/16 19:31:25 0052AD @ID NotRegisterd0REQ:INQ Error0
[11511] 2003/05/16 19:32:32 006CCD @ID NotRegisterd0REQ:INQ Error00    ///HST HstIpState Get hst_prepareProcess pIpI
[13200] 2003/01/01 00:01:16 00259C @(null)
[13200] 2003/01/01 00:01:31 002B59 @(null)
[13200] 2003/05/16 20:04:34 0025C9 @(null)
[13200] 2003/05/16 20:04:49 002B86 @(null)
[13200] 2003/05/16 20:09:08 002AF0 @(null)
```

6. **#1** [Click]

6. **#2** [Check]

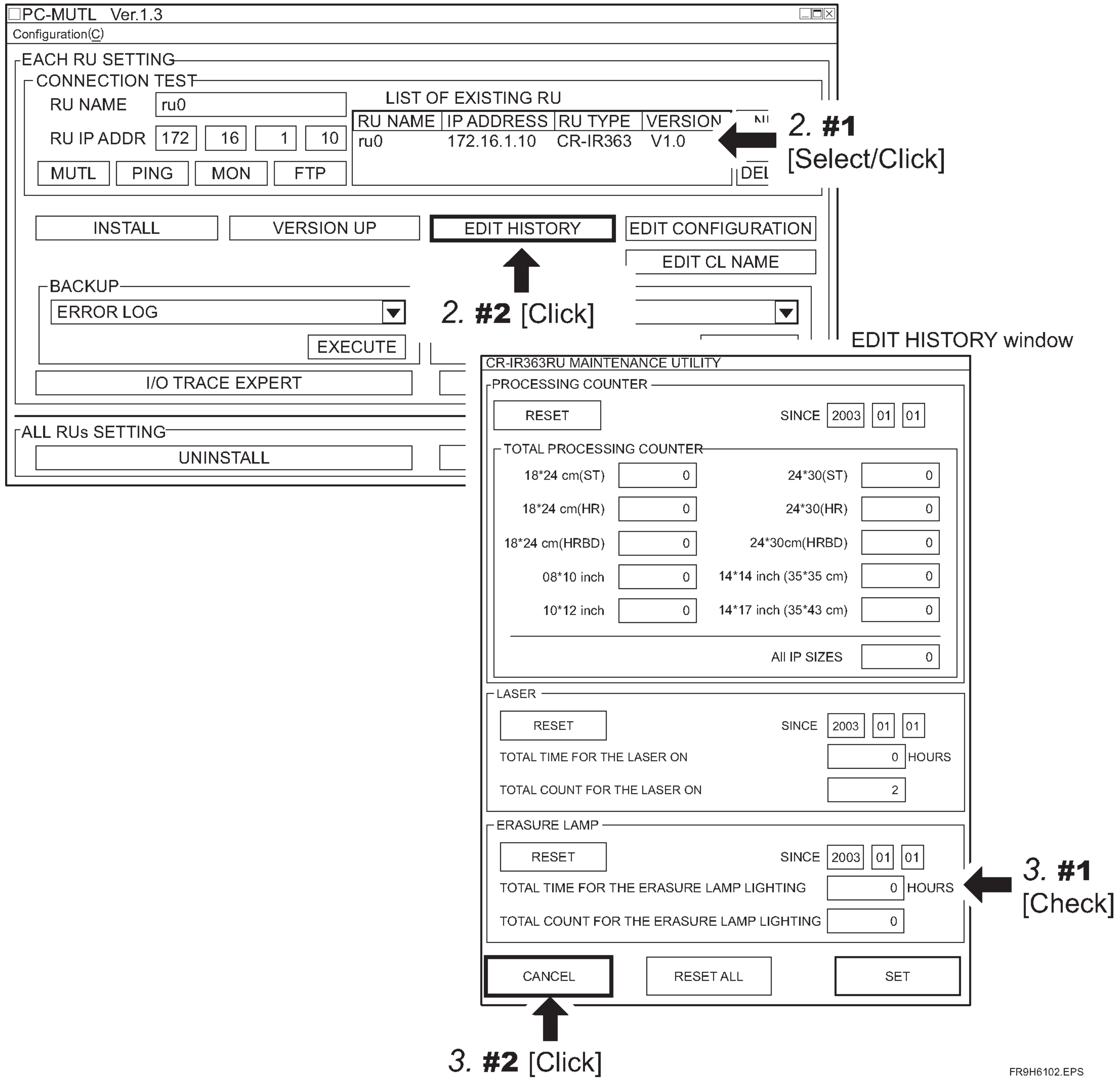
FR9H6103.EPS

1Y 2Y 3Y ☞ {PM:2.2}

2.2 Checking the Erasure Lamp Lighting Time

1Y **2Y** **3Y** ☞ {PM:3.1}

1. **Open the MAINTENANCE UTILITY window.**
2. **Open the EDIT HISTORY window.**
3. **Check the erasure lamp lighting time.**



PC-MUTL Ver.1.3
Configuration(C)

EACH RU SETTING

CONNECTION TEST

RU NAME: ru0

RU IP ADDR: 172 16 1 10

LIST OF EXISTING RU

RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.10	CR-IR363	V1.0

BACKUP: ERROR LOG

2. **#1** [Select/Click]

2. **#2** [Click]

EDIT HISTORY window

CR-IR363RU MAINTENANCE UTILITY

PROCESSING COUNTER — SINCE 2003 01 01

TOTAL PROCESSING COUNTER

18*24 cm(ST)	0	24*30(ST)	0
18*24 cm(HR)	0	24*30(HR)	0
18*24 cm(HRBD)	0	24*30cm(HRBD)	0
08*10 inch	0	14*14 inch (35*35 cm)	0
10*12 inch	0	14*17 inch (35*43 cm)	0

All IP SIZES: 0

LASER — SINCE 2003 01 01

TOTAL TIME FOR THE LASER ON: 0 HOURS

TOTAL COUNT FOR THE LASER ON: 2

ERASURE LAMP — SINCE 2003 01 01

TOTAL TIME FOR THE ERASURE LAMP LIGHTING: 0 HOURS

TOTAL COUNT FOR THE ERASURE LAMP LIGHTING: 0

3. **#1** [Check]

3. **#2** [Click]

MUTL
PING
MON
FTP
DEL
INSTALL
VERSION UP
EDIT HISTORY
EDIT CONFIGURATION
EDIT CL NAME
EXECUTE
I/O TRACE EXPERT
ALL RUs SETTING
UNINSTALL
RESET
CANCEL
RESET ALL
SET

FR9H6102.EPS

3. Checking the Image/Conveyance

The following checks are made in this section.
- Conveyance checks
- Image checks
- Check for output characters

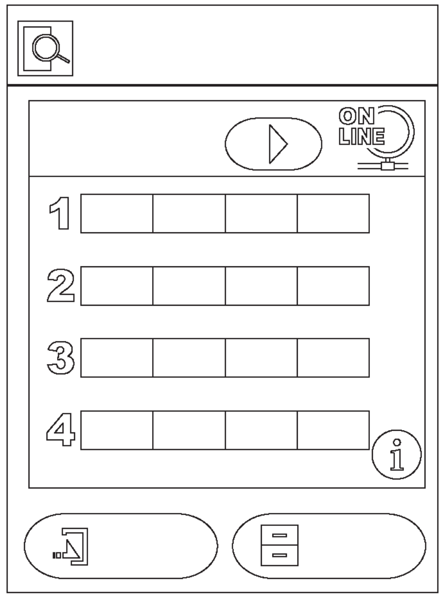
3.1 Check Before Procedures

1Y 2Y 3Y ☞ {PM:3.2}

◆ ***NOTES*** ◆

- *For the IP used for image/conveyance checks, an IP of the maximum size used in the hospital should be employed.*
- *Make sure that the IP to be used does not contain any important image data exposed.*

1. Check to ensure that the "READY" screen appears.



FR9H6603.EPS

2. Perform "Secondary Erasure" on the spontaneous radiation and image accumulated on the IP to be used.

☞ {Instruction Manual}

3. Perform IP exposures.

◆ ***INSTRUCTIONS*** ◆

- *Expose two IPs of maximum sizes for each of the IP types (ST/HR type and HR-BD type) used at the institution, with the following doses.*
- *With the X-ray tube, the first IP should be exposed in a normal orientation, and the second in a 180-degree upside-down orientation.*
- *When the "HR" IP is used in conjunction with the molybdenum X-ray tube, the IP should be exposed under conditions of "● "For "HR-BD" IP."*

● For "ST/HR" IP

- X-ray tube: Tungsten X-ray tube
- Exposure X-ray dose: 1 mR
- Maximum size: IP of 14"x14" (35cm x 35cm) or 14"x17" (35cm x 43cm) size
- Reference conditions: Distance 1.8 m
  Voltage 80 Kv
  Amperage 50 mA
  Time 0.013 sec

● For "HR-BD" IP

- X-ray tube: Molybdenum X-ray tube
- Exposure X-ray dose: 20 mR
- Maximum size: IP of 18"x24" HR-BD or 24"x30" HR-BD size
- Reference conditions: Distance 0.55 m
  Voltage 25 Kv
  Amperage 100 mA
  Time 0.053 sec

3.2 Image/Conveyance Checks

1Y 2Y 3Y

◆ ***NOTE*** ◆

Because the "MENU" and so forth differ depending on the IP type, image checks should be performed with the "MENU" specified below.

1. **Record the IP, which was exposed as instructed in "3.1 Check Before Procedures," under the following film output conditions, and output it.**

- "ST/HR" IP

  Film output conditions: “TEST”, “Image Format” or “Image Format - 2”, “SINGLE”

- "HR-BD" IP

  Film output conditions: “TEST”, “Image Format” or “Image Format - 2”, “SINGLE”

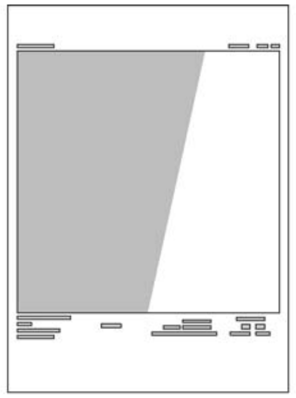
2 **Verify that there is no "unusual nonuniformity" found on the output film or on the image displayed on the image monitor.**

◆ ***CHECK*** ◆

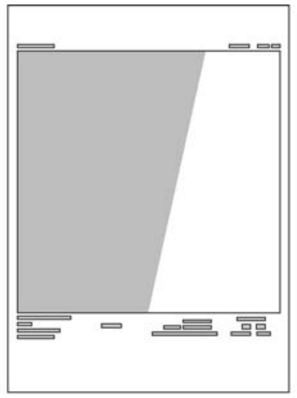
There should be no uneven density difference in the main scan direction.

If there is any uneven density difference, compare the films outputted from the two IPs of the same size, and determine whether such nonuniformity is caused by the machine or X-ray tube.

- If there is uneven density difference in the same direction on two films



IP in normal orientation (first IP)



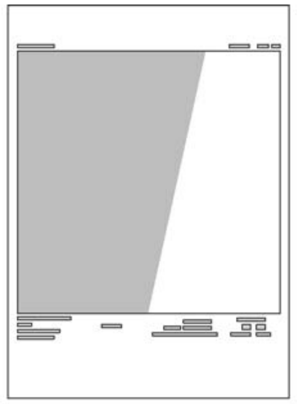
IP in 180-degree upside-down orientation (second IP)

FR9H6604.EPS

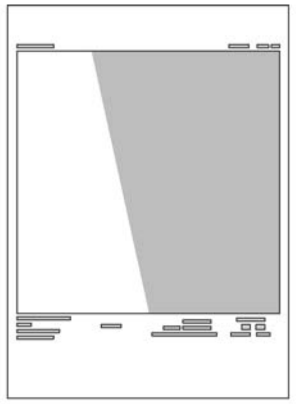
→ The machine may be the cause of such nonuniformity.

☞ {Troubleshooting}

- If positions of uneven density difference are different



IP in normal orientation (first IP)



IP in 180-degree upside-down orientation (second IP)

FR9H6605.EPS

→ The X-ray tube may be the cause of such nonuniformity.

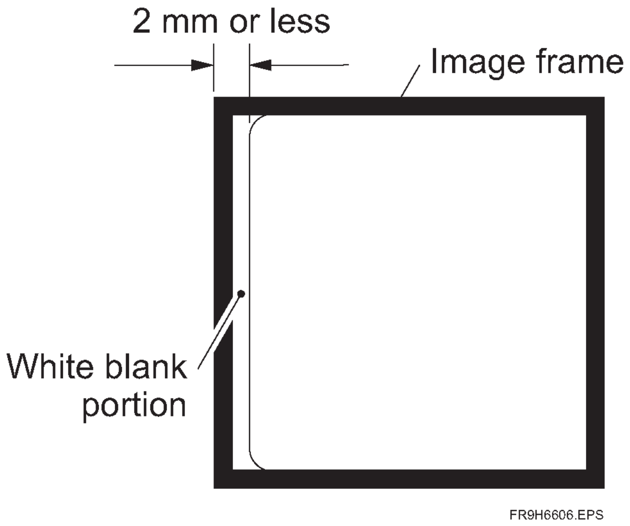
3 Check the image format.

Make sure that the white blank portion is 2 mm or less, as actually measured on the IP, from the outermost edge of the image frame of the film outputted.

◆ CHECK ◆

The white blank portion should be 2 mm or less.
If anything abnormal is found:

☞ *{Troubleshooting}*


2 mm or less
Image frame
White blank portion
FR9H6606.EPS

◆ NOTE ◆

The distance measured on the film may differ from the actual size on the IP, depending on the reading size and film size. The actual size on the IP should be calculated using the distance measured on the film and the reduction factor for the film. Compute the actual size on the IP according to the following equation.

$$\text{Actual size on IP} = \text{Measured value} \times \frac{100}{\text{Reduction factor (\%)}}$$

FR9H6607.EPS

1Y 2Y 3Y ☞ {PM:3.3}

3.3 Checking the Output Characters

1Y 2Y 3Y ☞ {PM:4.1}

Make sure that the film character format information that was set in “Outputting the Film for Image Check” is displayed on the output film. Also verify that none of the characters look blurred or broken.

1. Check the output characters.

◆ INSTRUCTION ◆

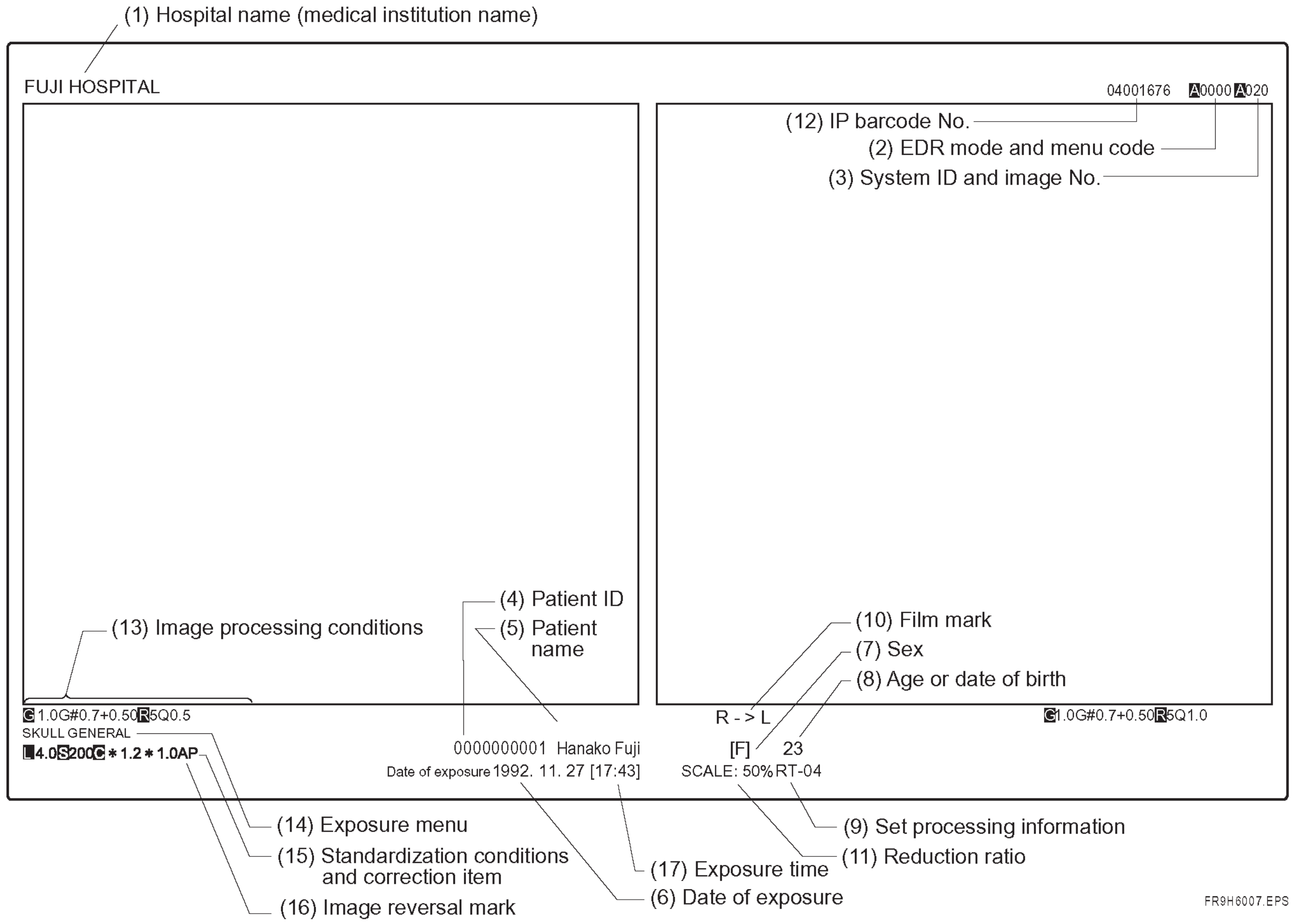
Check the following.
- *The character format information that has been set is correct.*
- *There is nothing abnormal,such as blurred or broken characters.*

If anything abnormal is found;

☞ *{MT:Troubleshooting}*

◇ REFERENCE ◇

The details of output characters and the character display locations are as follows.

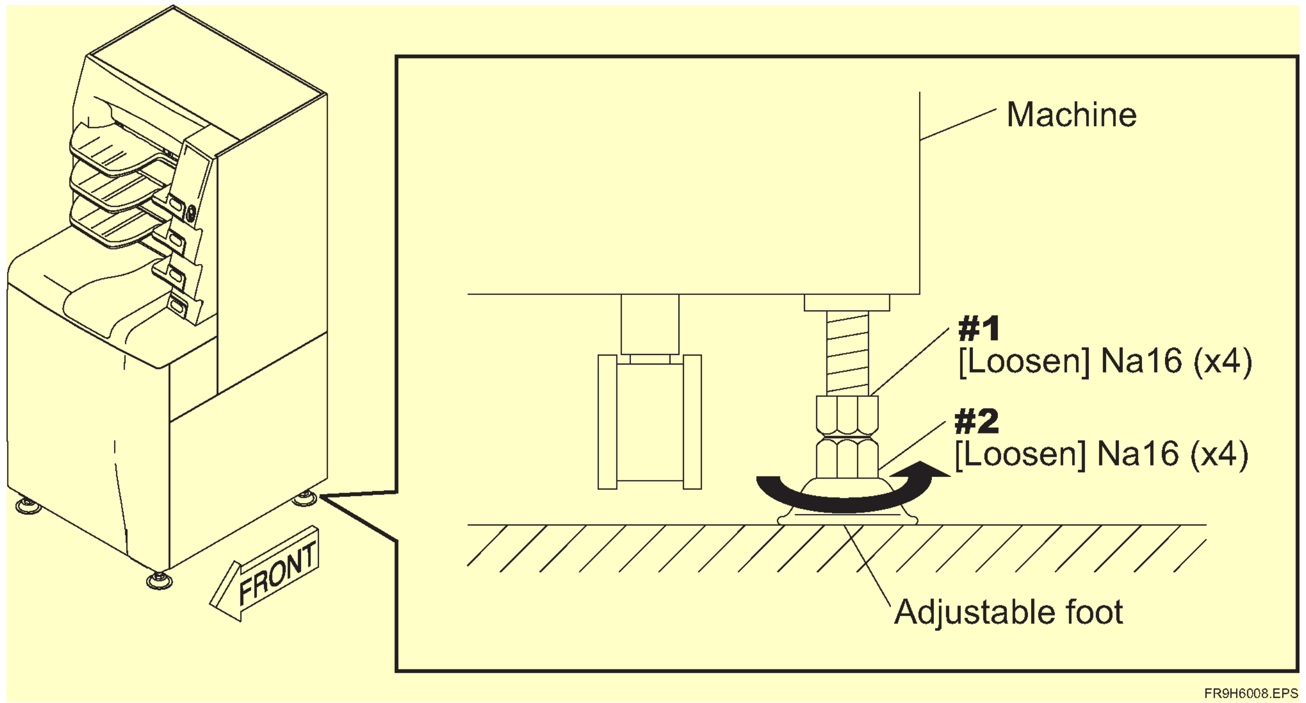

(1) Hospital name (medical institution name)
FUJI HOSPITAL
04001676 A0000 A020
(12) IP barcode No.
(2) EDR mode and menu code
(3) System ID and image No.
(13) Image processing conditions
(4) Patient ID
(5) Patient name
(10) Film mark
(7) Sex
(8) Age or date of birth
G1.0G#0.7+0.50R5Q0.5
SKULL GENERAL
L4.0S200C＊1.2＊1.0AP
0000000001 Hanako Fuji
Date of exposure 1992. 11. 27 [17:43]
R - > L
[F] 23
SCALE: 50% RT-04
G1.0G#0.7+0.50R5Q1.0
(14) Exposure menu
(15) Standardization conditions and correction item
(16) Image reversal mark
(17) Exposure time
(6) Date of exposure
(9) Set processing information
(11) Reduction ratio
FR9H6007.EPS

4. Pulling Out the Machine

4.1 Unlocking the Retainers

1Y 2Y 3Y ☞ {PM:4.2}

1. Power OFF the CL.
2. Power OFF the RU.
3. Unlock the adjustable feet.

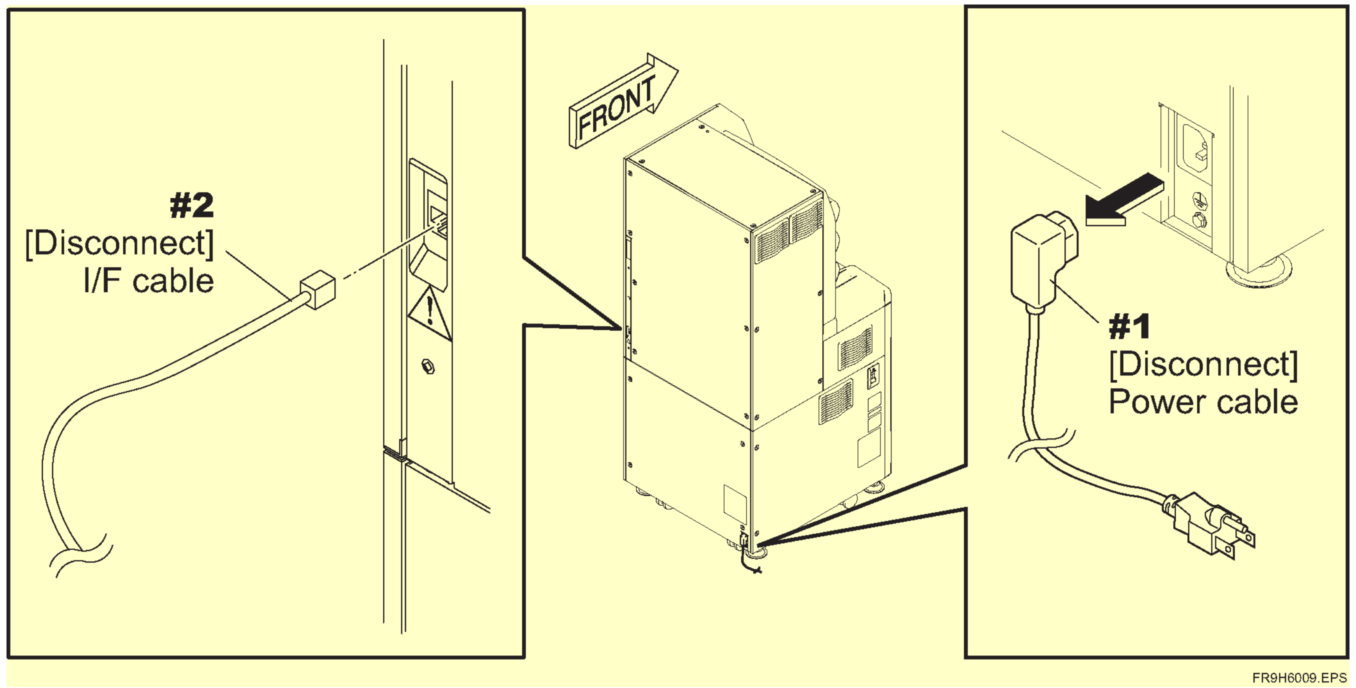

Machine
#1
[Loosen] Na16 (x4)
#2
[Loosen] Na16 (x4)
Adjustable foot
FRONT
FR9H6008.EPS

4.2 Disconnecting the Cables

#20001 or later : 1Y 3Y ☞ {PM:5.1} 2Y ☞ {PM:5.3}

#50001 or later : 1Y ☞ {PM:5.1} 2Y ☞ {PM:5.3} 3Y ☞ {PM:5.4}

1. Disconnect the power cable and I/F cable.

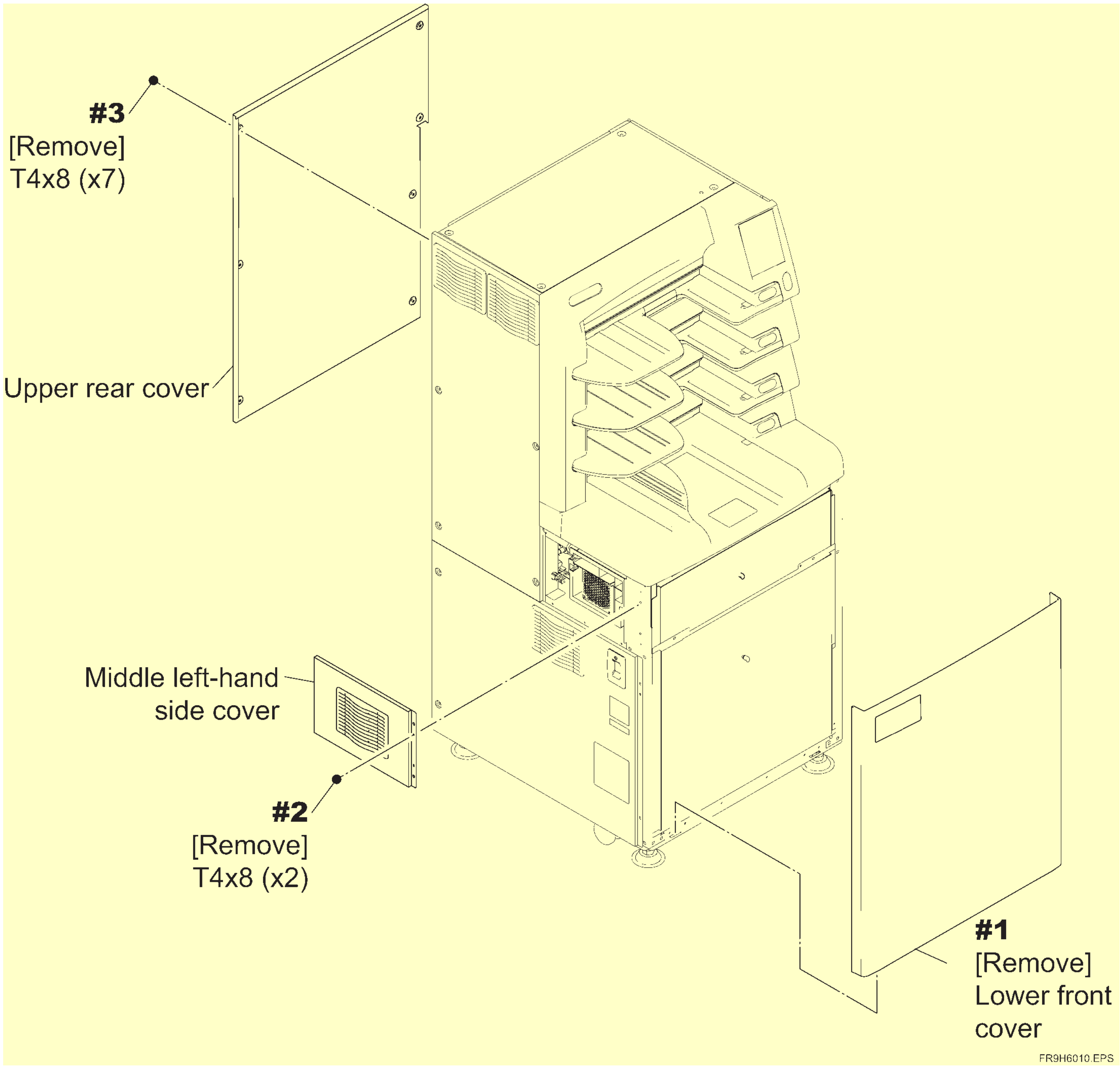

#2
[Disconnect]
I/F cable
FRONT
#1
[Disconnect]
Power cable
FR9H6009.EPS

5. Removing the Covers

5.1 Removing the Covers (1 or 3 Year Intervals)

1Y **3Y** ☞ {PM:8.4.1}

1. Remove the covers.


#3
[Remove]
T4x8 (x7)
Upper rear cover
Middle left-hand side cover
#2
[Remove]
T4x8 (x2)
#1
[Remove]
Lower front cover
FR9H6010.EPS

5.2 Nothing

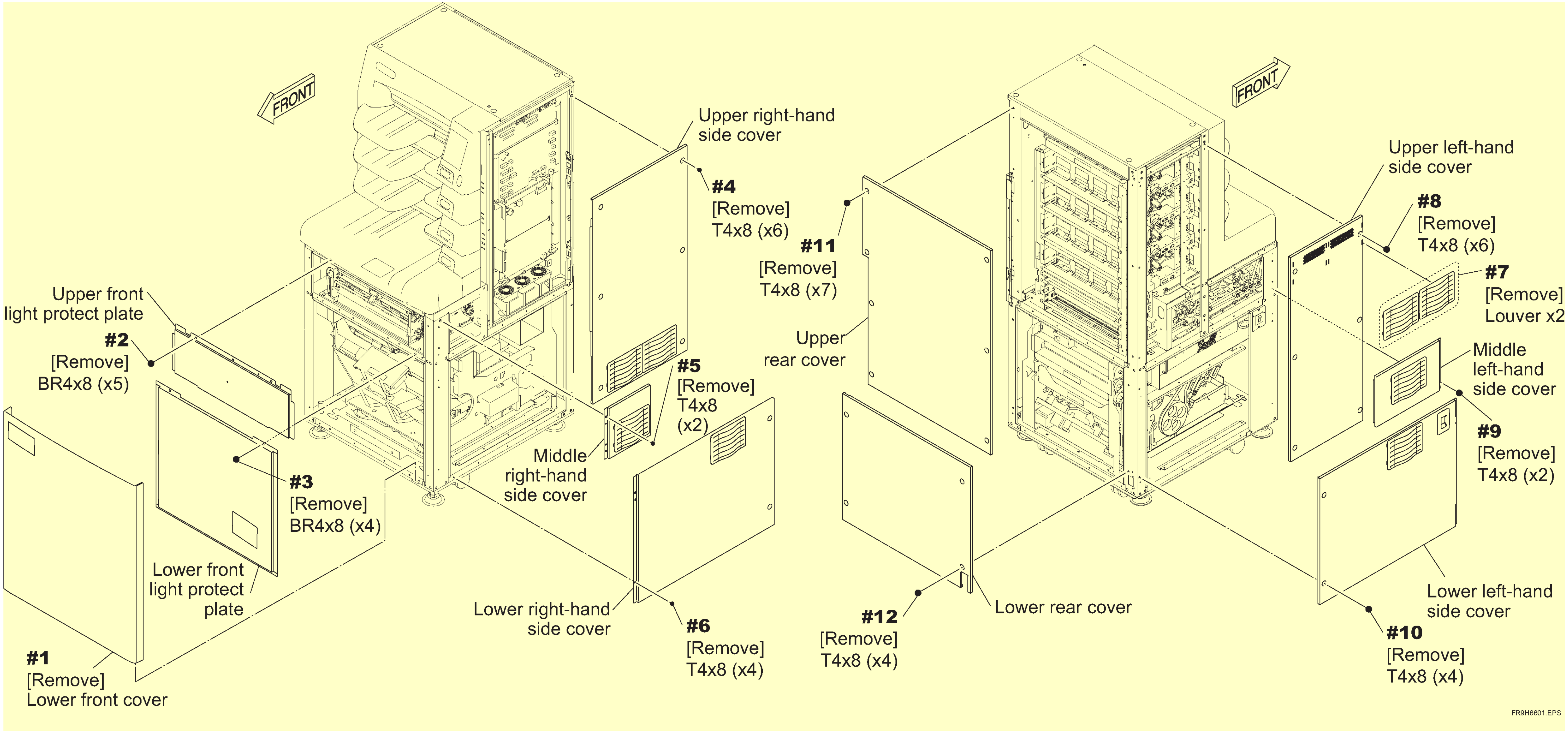
5.3 Removing the Covers (2 Year Intervals)

2Y ☞ {PM:6.}

1. Remove the covers.

◆ *INSTRUCTION* ◆

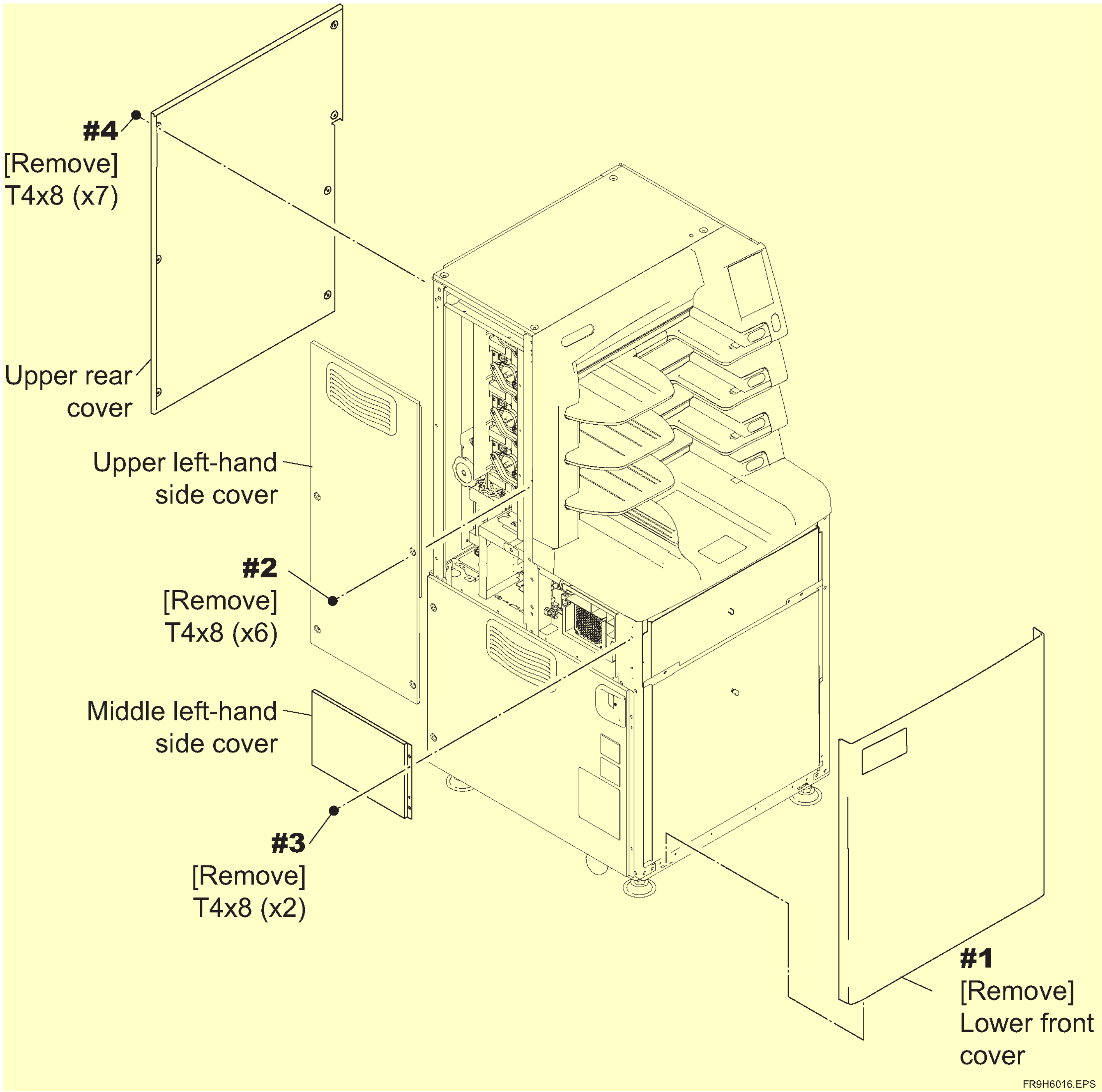
When removing the upper left-hand side cover, take off the louvers first.
The screw is hidden behind the louvers.


FRONT
FRONT
Upper right-hand side cover
#4
[Remove]
T4x8 (x6)
#11
[Remove]
T4x8 (x7)
Upper rear cover
Upper left-hand side cover
#8
[Remove]
T4x8 (x6)
#7
[Remove]
Louver x2
Middle left-hand side cover
#9
[Remove]
T4x8 (x2)
Upper front light protect plate
#2
[Remove]
BR4x8 (x5)
#5
[Remove]
T4x8
(x2)
Middle right-hand side cover
#3
[Remove]
BR4x8 (x4)
Lower front light protect plate
Lower right-hand side cover
#6
[Remove]
T4x8 (x4)
#12
[Remove]
T4x8 (x4)
Lower rear cover
Lower left-hand side cover
#10
[Remove]
T4x8 (x4)
#1
[Remove]
Lower front cover
FR9H6601.EPS

5.4 Removing the Covers (3 Year Intervals : #50001 or later)

3Y ☞ {PM:7.1}

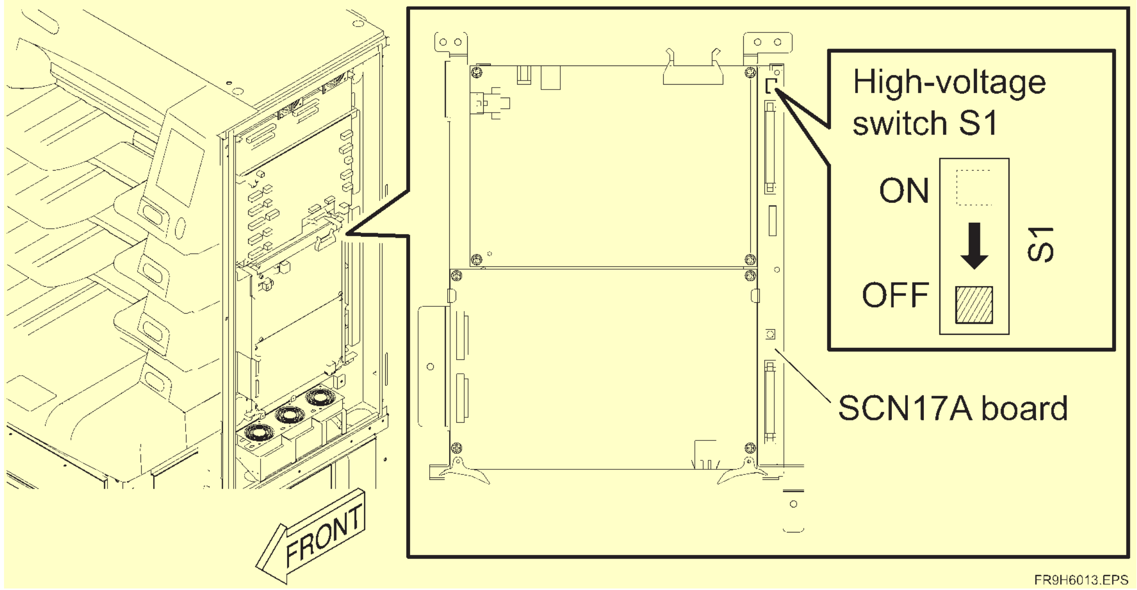
1. **Remove the covers.**


#4
[Remove]
T4x8 (x7)
Upper rear cover
Upper left-hand side cover
#2
[Remove]
T4x8 (x6)
Middle left-hand side cover
#3
[Remove]
T4x8 (x2)
#1
[Remove]
Lower front cover
FR9H6016.EPS

6. Turning OFF the High-Voltage Switch

2Y ☞ {PM:7.1} **3Y** ☞ {PM:8.4.1}

1. **Turn OFF the high-voltage switch of the SCN17A board.**


High-voltage switch S1
ON
OFF
S1
SCN17A board
FRONT
FR9H6013.EPS

7. Cassette Set Unit

7.1 Removing the Feed/Load Conveyor Unit

#20001 or later : **2Y** ☞ {PM:7.2}

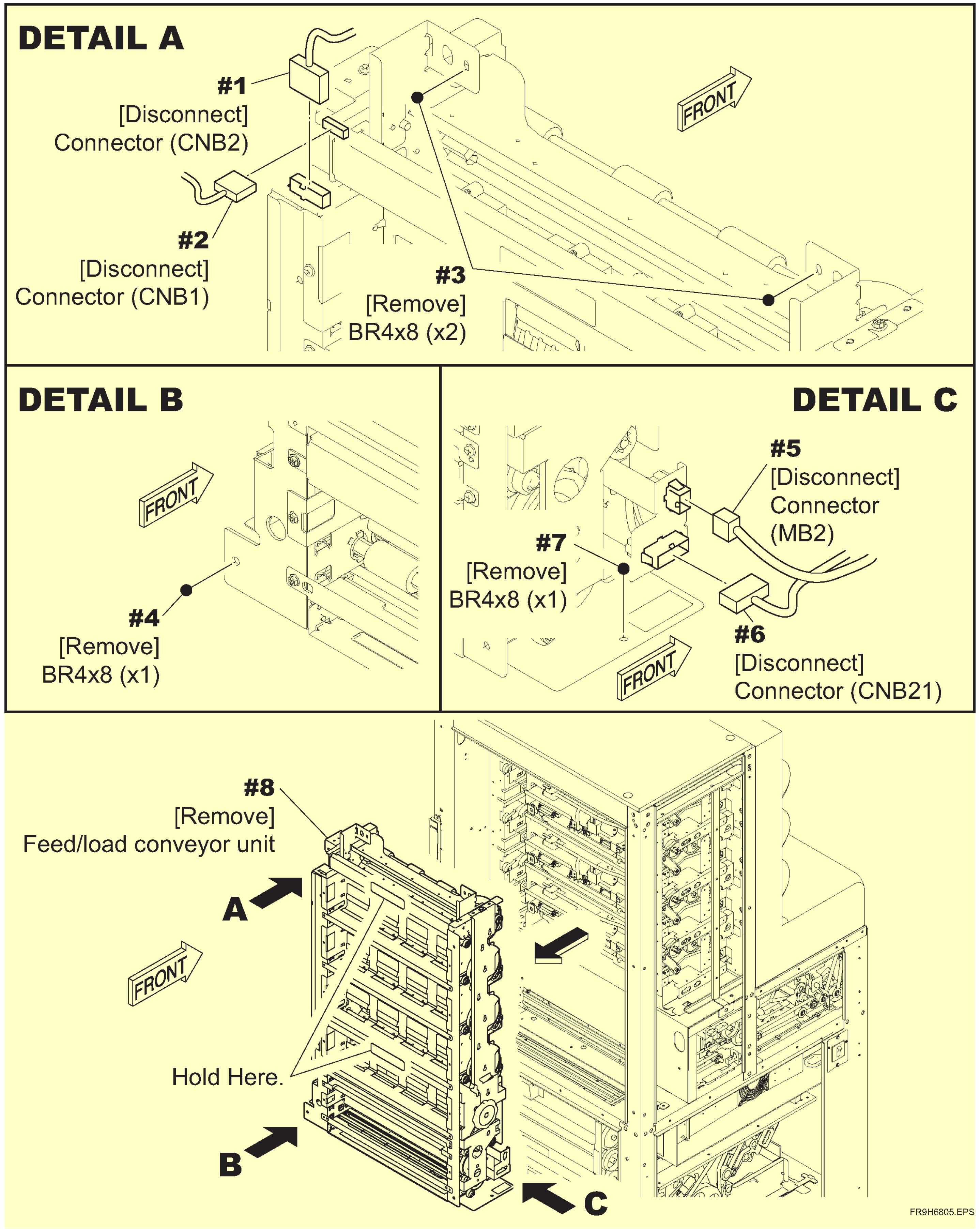
#50001 or later : **3Y** ☞ {PM:7.3}

◆ ***NOTE*** ◆

Because the feed/load conveyor unit is heavy, pay attention to the following points when removing, installing, and moving it.

- *Before proceeding with the procedures,secure sufficient working space around the machine.*
- *Get hold of the portions indicated by the "Hold Here" labels.*
- *While assuming a comfortable posture, lift or hold up the unit.*

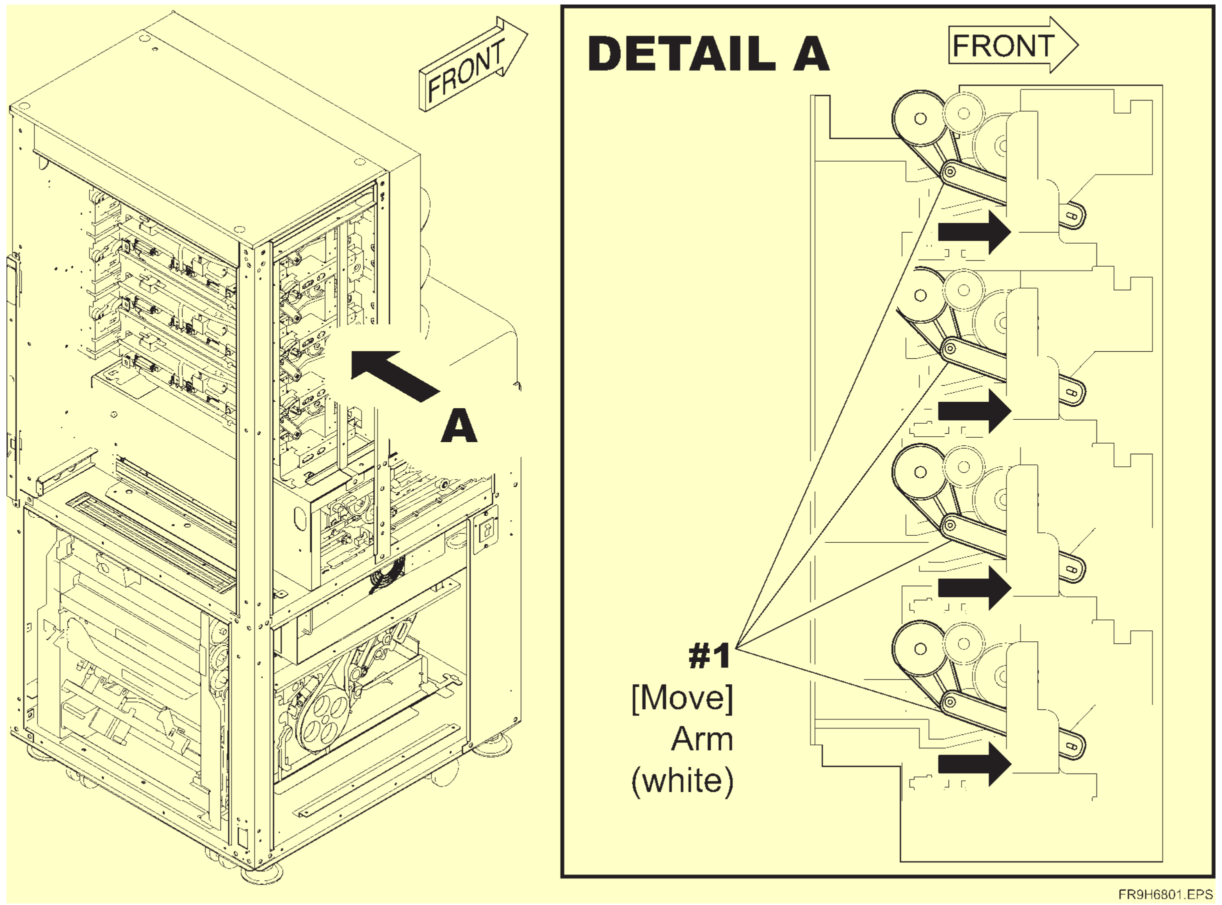
1. **Remove the feed/load conveyor unit.**


DETAIL A
#1
[Disconnect]
Connector (CNB2)
#2
[Disconnect]
Connector (CNB1)
#3
[Remove]
BR4x8 (x2)
FRONT
DETAIL B
FRONT
#4
[Remove]
BR4x8 (x1)
DETAIL C
#5
[Disconnect]
Connector
(MB2)
#7
[Remove]
BR4x8 (x1)
FRONT
#6
[Disconnect]
Connector (CNB21)
#8
[Remove]
Feed/load conveyor unit
A
FRONT
Hold Here.
B
C
FR9H6805.EPS

7.2 Cleaning the Rubber Rollers and Suction Cups

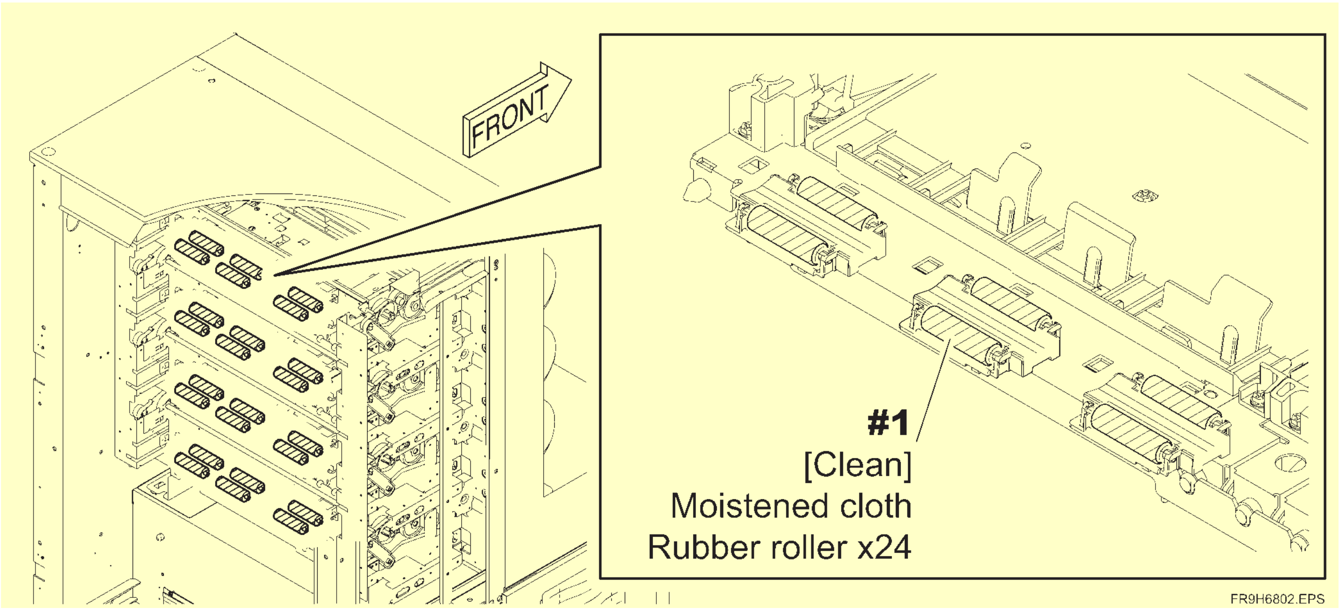
2Y

1. Move the arms (white) to the positions illustrated below.


FRONT
A
DETAIL A
FRONT
FR9H6801.EPS

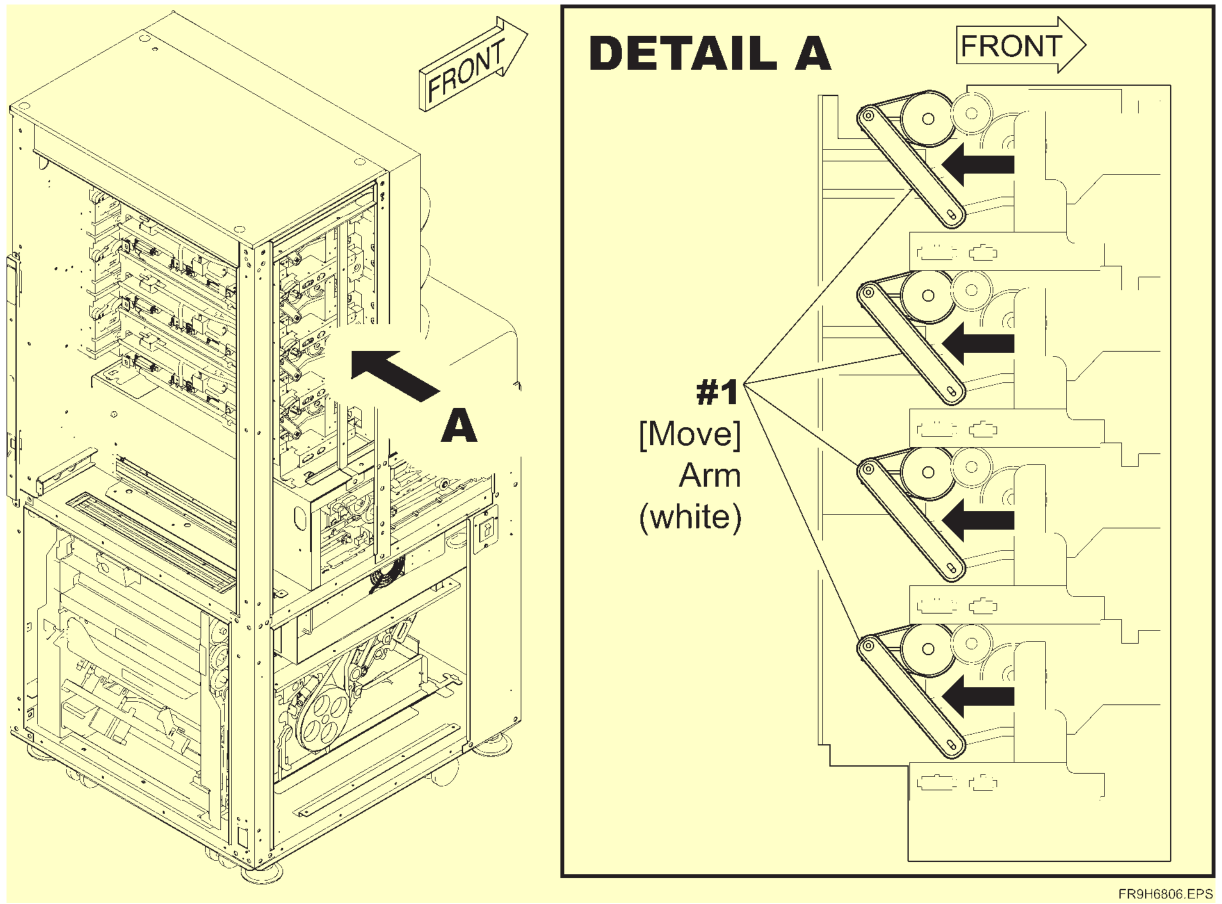
#1
[Move]
Arm
(white)

2. Wipe the rubber rollers with a moistened cloth.


FRONT
FR9H6802.EPS

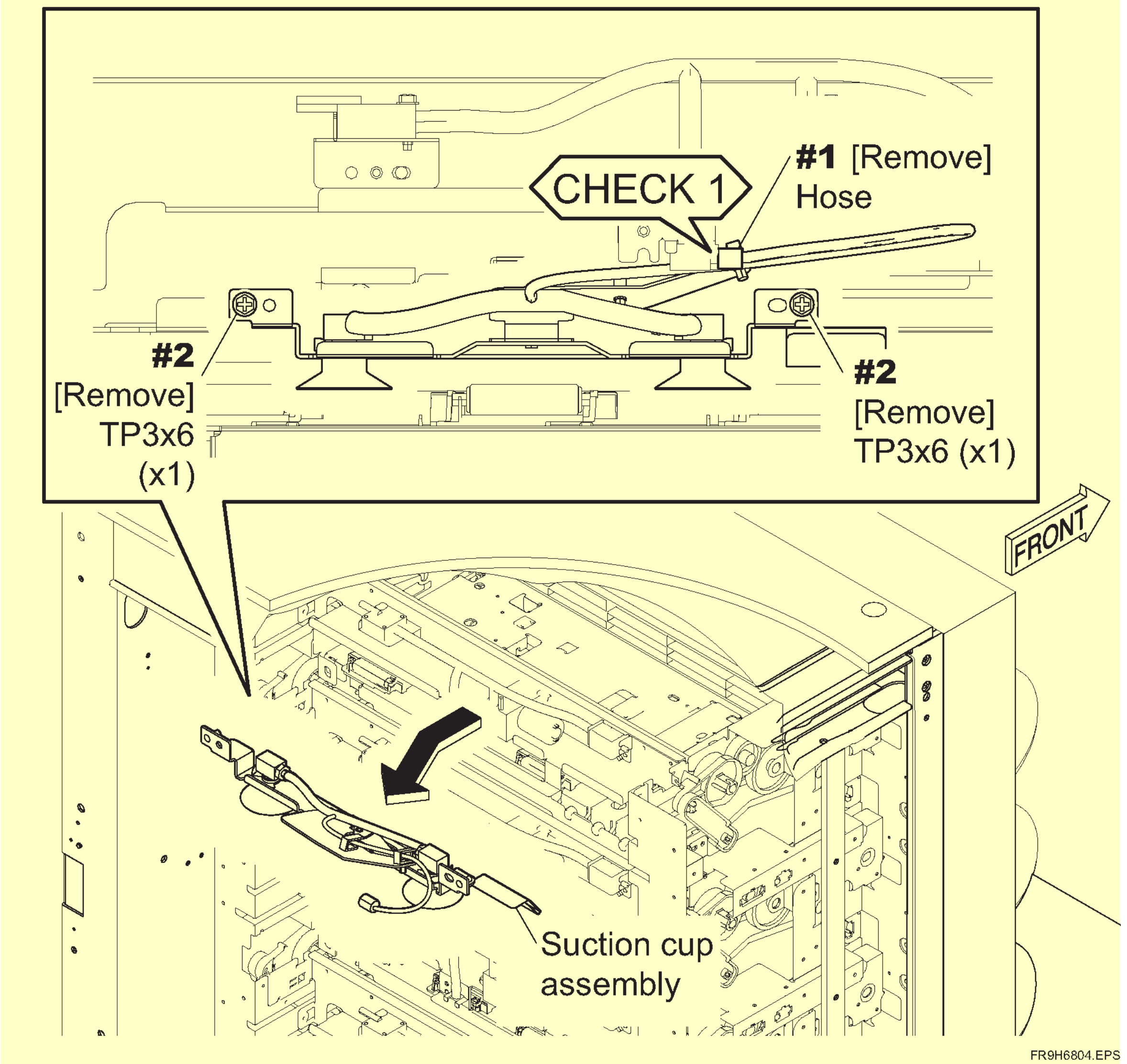
#1
[Clean]
Moistened cloth
Rubber roller x24

3. Move the arms (white) to the positions illustrated below.


FRONT
A
DETAIL A
FRONT
FR9H6806.EPS

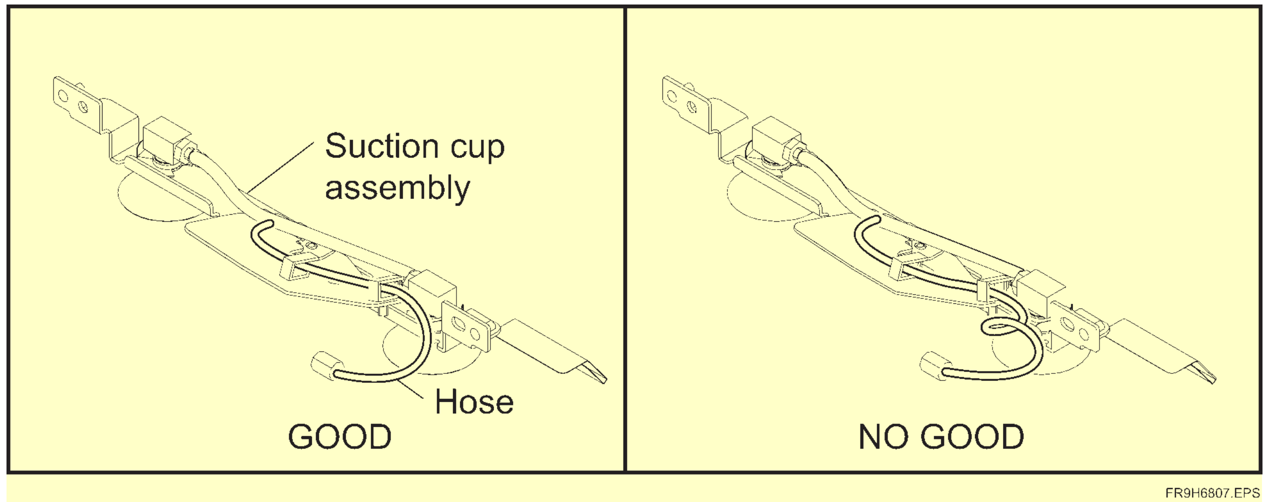
#1
[Move]
Arm
(white)

4. **Remove the suction cup assembly for the first shelf.**

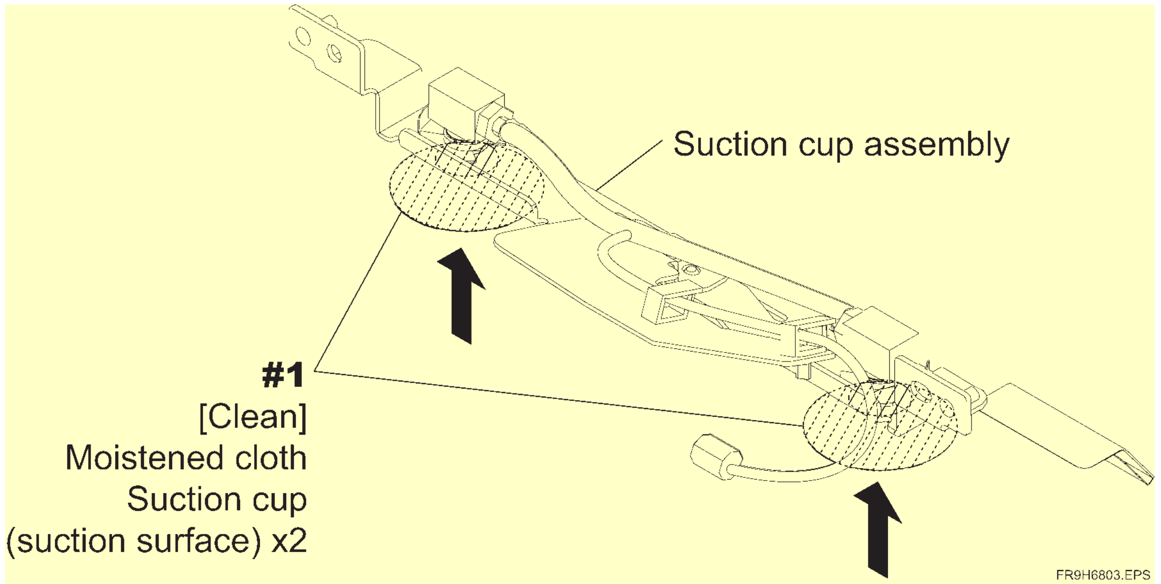

CHECK 1
#1 [Remove]
Hose
#2
[Remove]
TP3x6
(x1)
#2
[Remove]
TP3x6 (x1)
FRONT
Suction cup
assembly
FR9H6804.EPS

- **CHECK 1**

  - To attach the hose, push it all the way.
  - Make sure that the route of the hose is stress-free and normal.


Suction cup
assembly
Hose
GOOD
NO GOOD
FR9H6807.EPS

5. **Clean the suction cups (suction surfaces) with a moistened cloth.**


Suction cup assembly
#1
[Clean]
Moistened cloth
Suction cup
(suction surface) x2
FR9H6803.EPS

6. **Reinstall the suction cup assembly in reverse order of removal.**

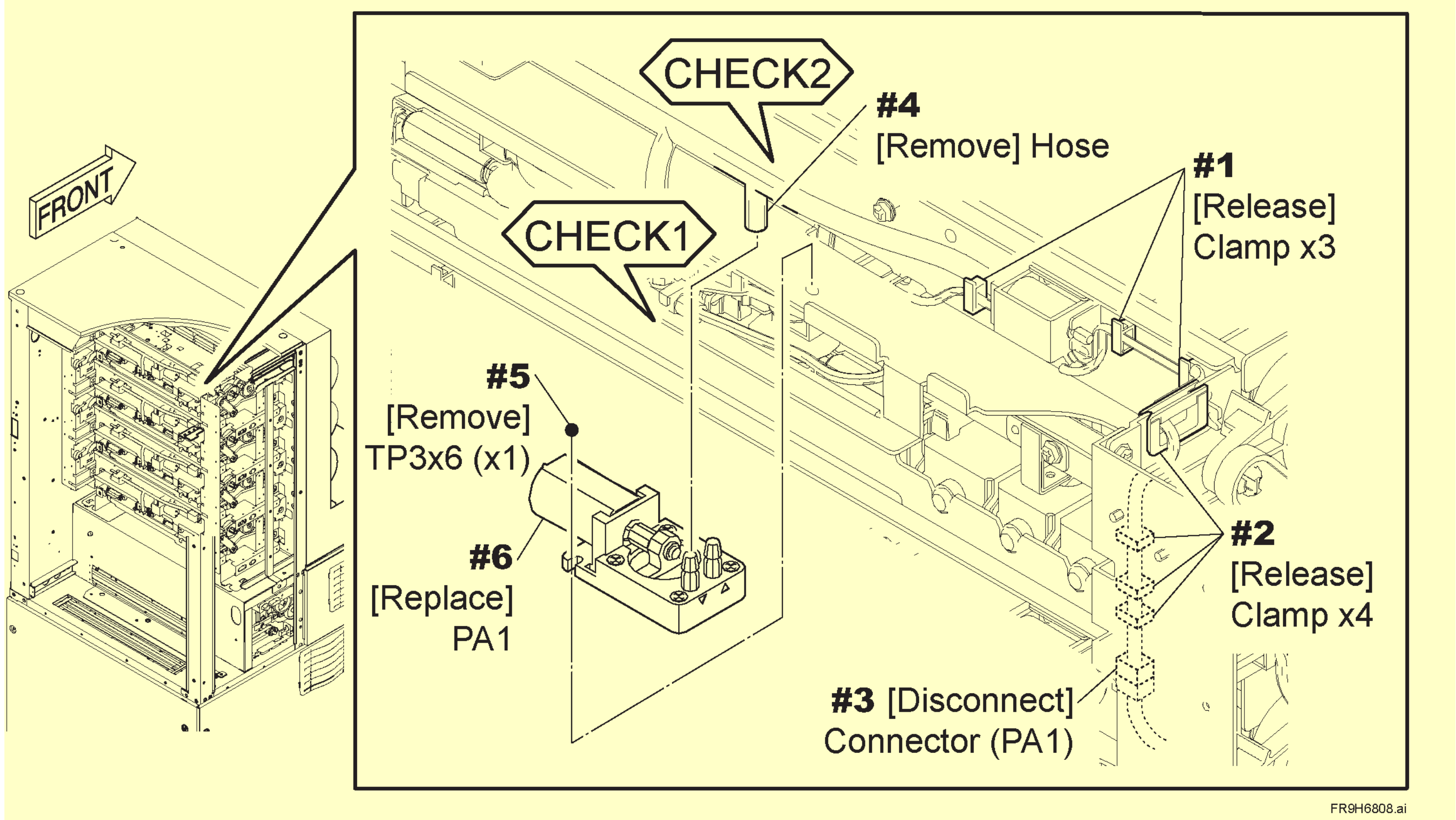
7. **For the rubber rollers and suction cup assemblies for the second, third, and fourth shelves, repeat steps 1 through 6 to clean them.**

2Y ☞ {PM:8.1}

7.3 Replacing the IP Suction Pumps (#50001 or Later)

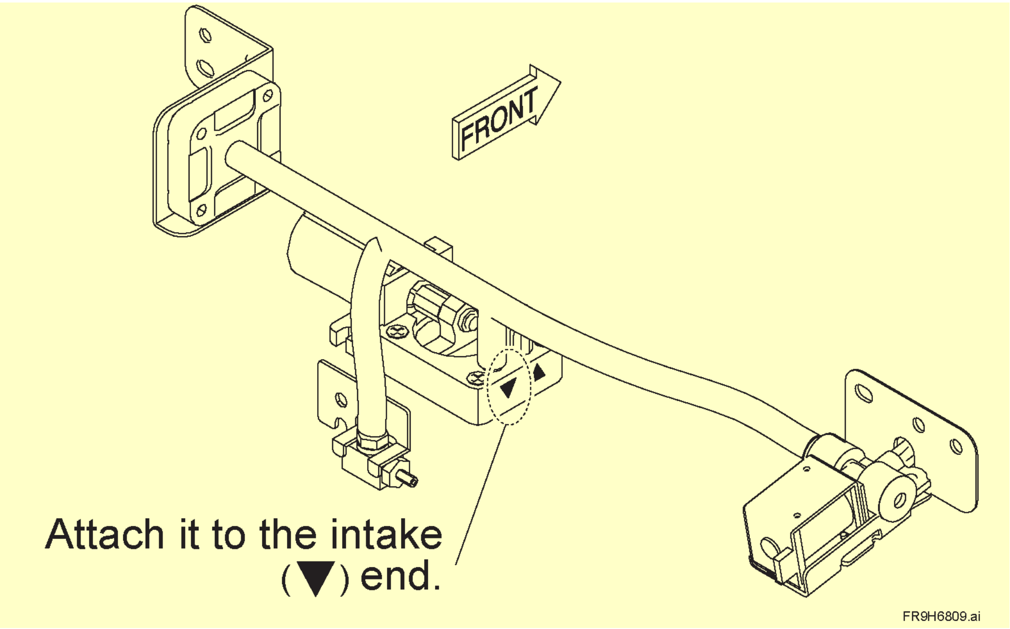
3Y ☞ {PM:8.4.2}

1. **Replacing the PA1.**


FRONT
CHECK2
#4
[Remove] Hose
#1
[Release]
Clamp x3
CHECK1
#5
[Remove]
TP3x6 (x1)
#6
[Replace]
PA1
#2
[Release]
Clamp x4
#3 [Disconnect]
Connector (PA1)
FR9H6808.ai

- CHECK 1

Make sure that the hose is attached in a proper position as illustrated below.


FRONT
Attach it to the intake
(▼) end.
FR9H6809.ai

- CHECK 2

To attach the hose, push it all the way.

2. **Reinstall the PA1 in reverse order of removal.**
3. **For the IP suction pumps for the second, third, and fourth shelves, repeat steps 1 and 2 to replace them.**

◆ ***NOTE*** ◆

After the restoration, perform "23. Reset the number that pumps are used".

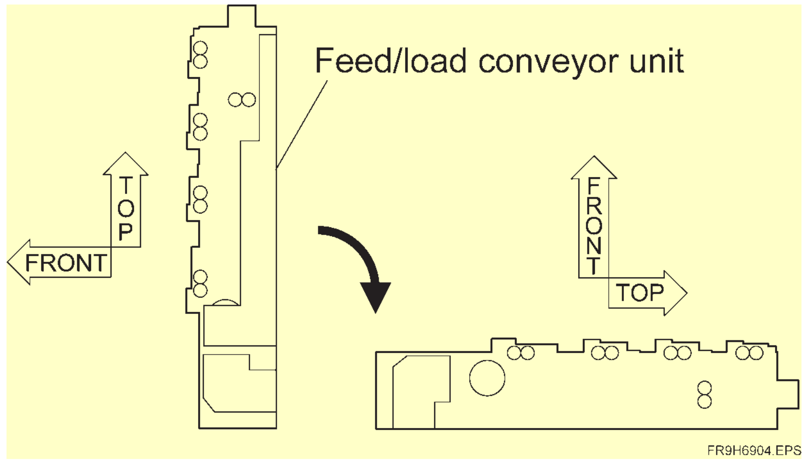
8. Feed/Load Conveyor Unit

8.1 Cleaning the Shock Absorbing Rollers, Guides, and Rubber Rollers

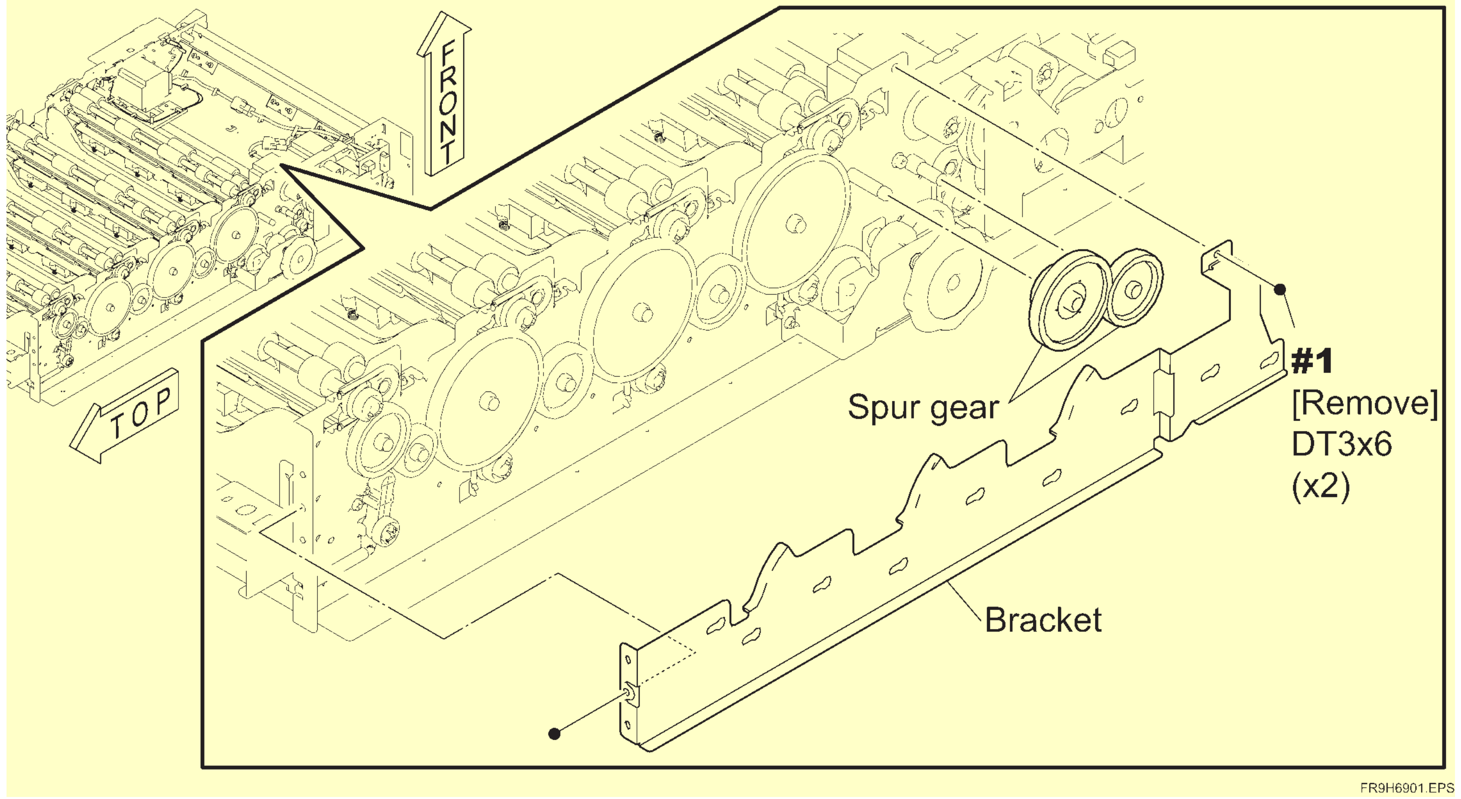
2Y

◆ ***INSTRUCTION*** ◆

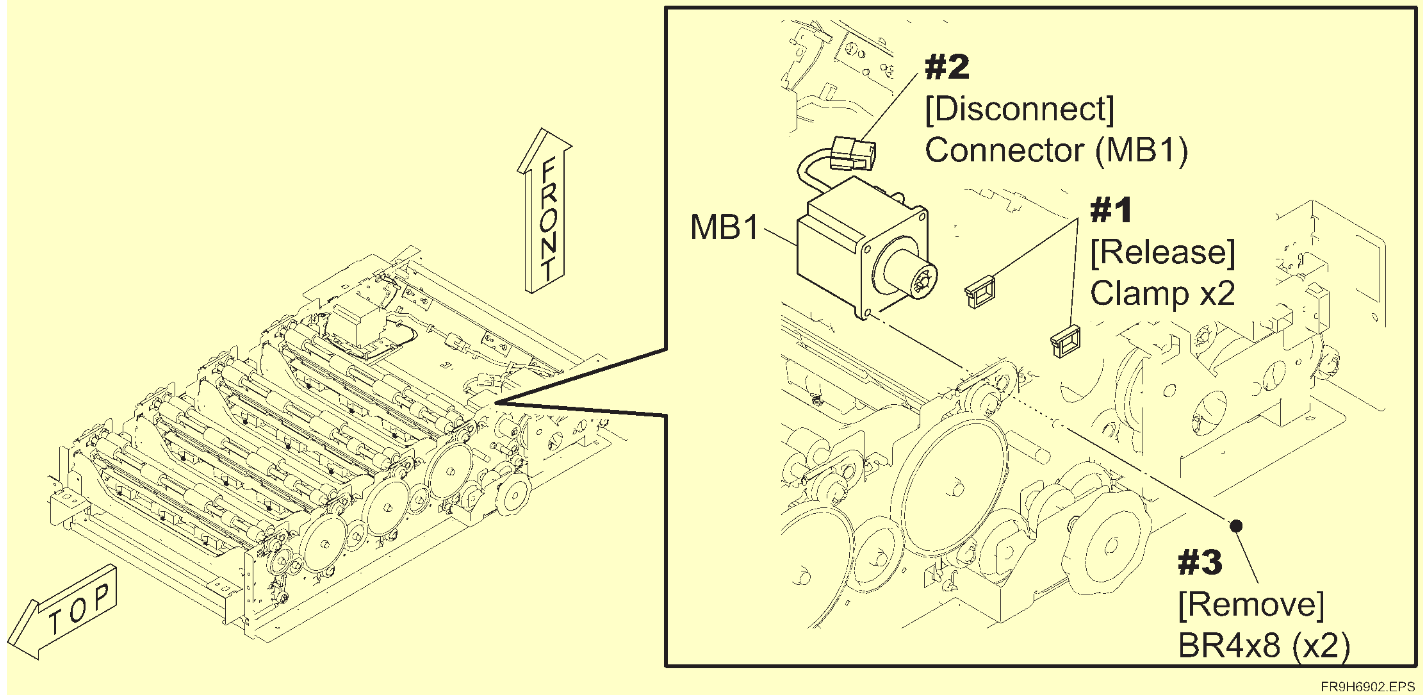
During the procedures, put down the feed/load conveyor unit in such an orientation as illustrated below. Otherwise, the feed/load conveyor unit might topple down, so that it might be damaged.


Feed/load conveyor unit
TOP
FRONT
FRONT
TOP
FR9H6904.EPS

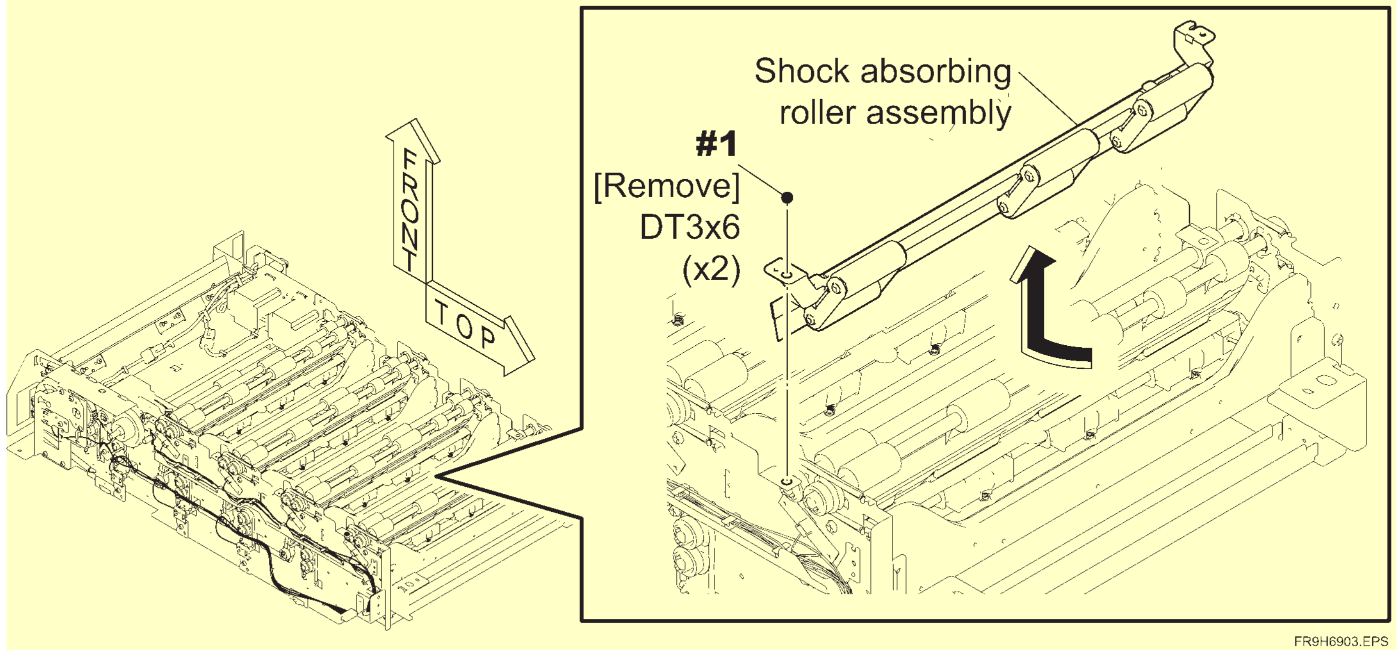
1. **Remove the spur gears.**


FRONT
TOP
Spur gear
#1
[Remove]
DT3x6
(x2)
Bracket
FR9H6901.EPS

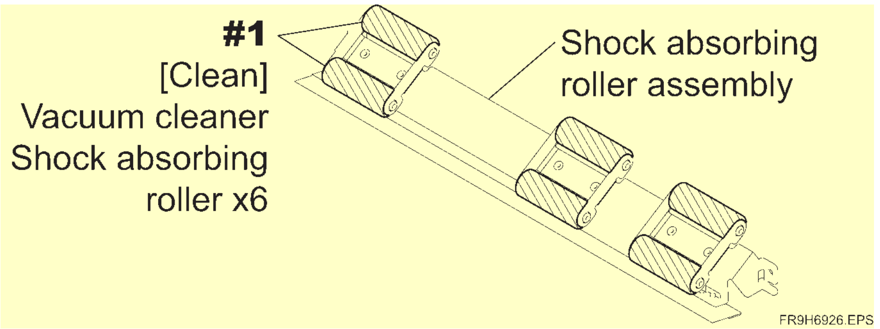
2. **Remove the motor (MB1).**


FRONT
TOP
#2
[Disconnect]
Connector (MB1)
MB1
#1
[Release]
Clamp x2
#3
[Remove]
BR4x8 (x2)
FR9H6902.EPS

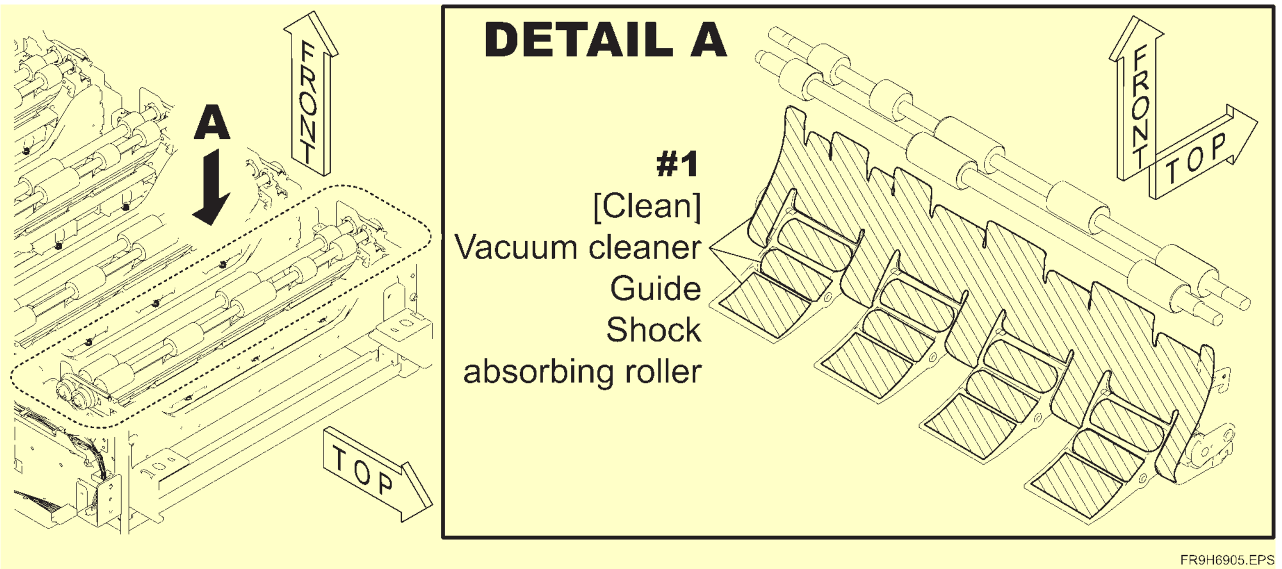
3. **Remove the shock absorbing roller assembly for the first shelf.**


FRONT
TOP
Shock absorbing
roller assembly
#1
[Remove]
DT3x6
(x2)
FR9H6903.EPS

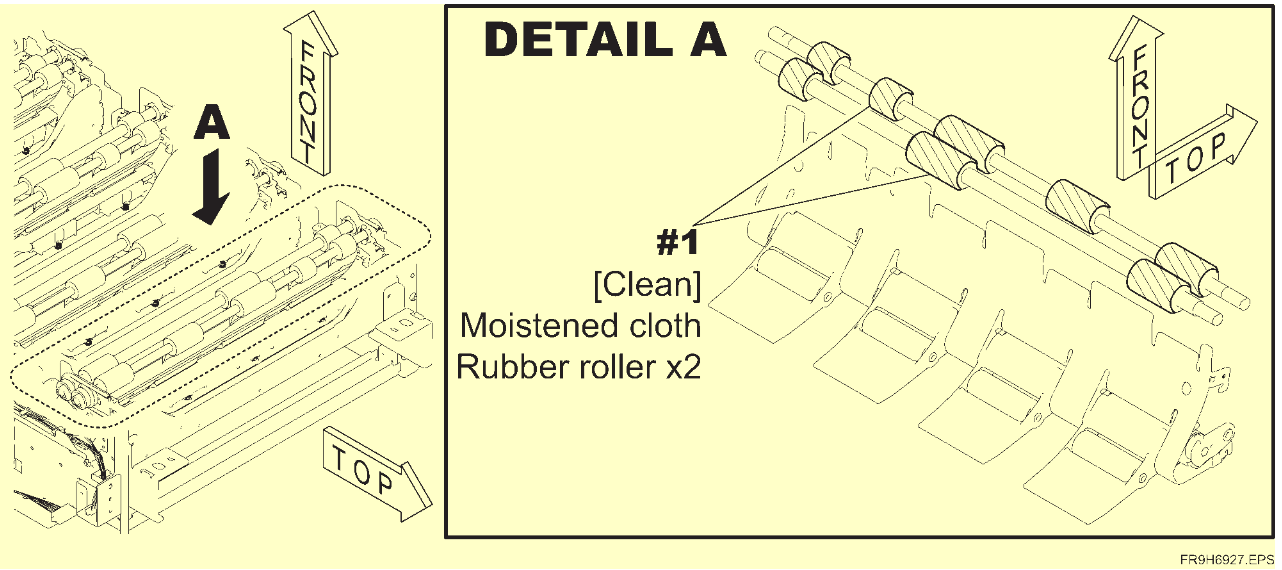
4. **Clean the shock absorbing roller assembly by use of a vacuum cleaner.**


#1
[Clean]
Vacuum cleaner
Shock absorbing roller x6
Shock absorbing roller assembly
FR9H6926.EPS

5. **Clean the shock absorbing rollers and guides by use of a vacuum cleaner.**


A
FRONT
TOP
DETAIL A
#1
[Clean]
Vacuum cleaner
Guide
Shock absorbing roller
FRONT
TOP
FR9H6905.EPS

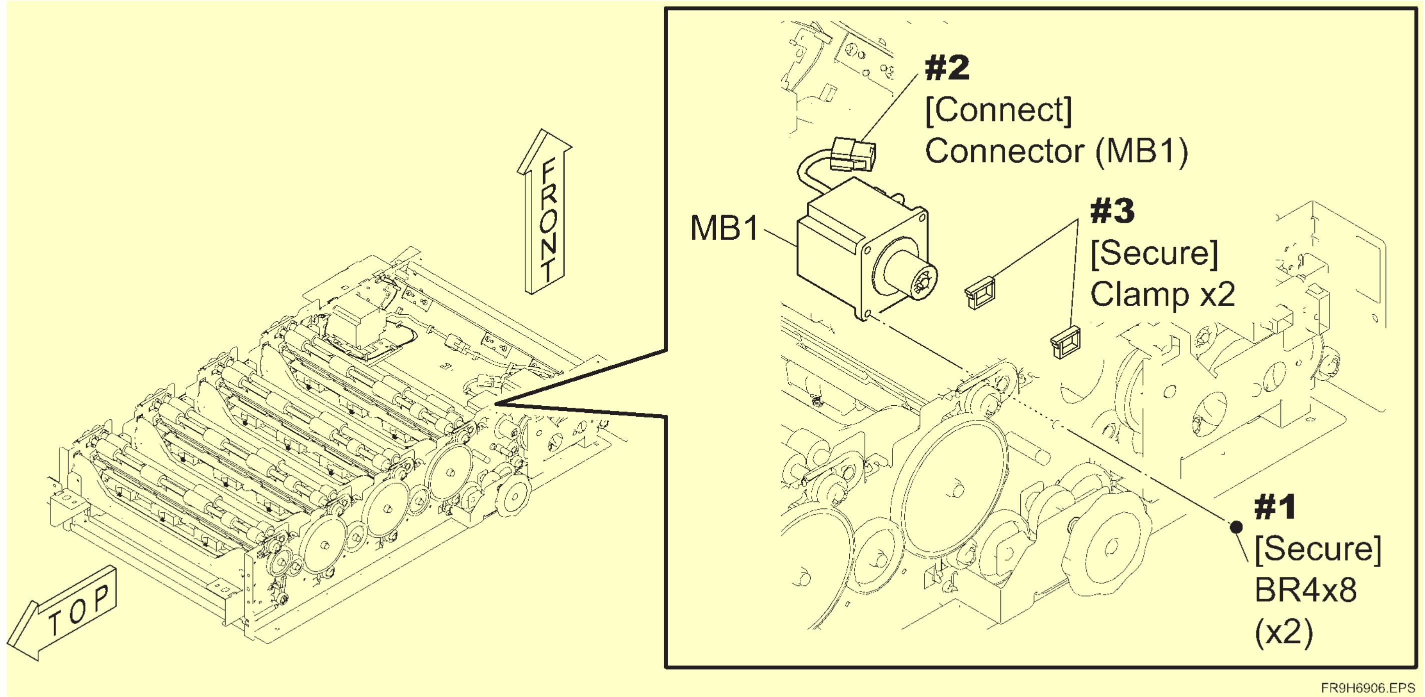
6. **Wipe the rubber rollers with a moistened cloth.**


A
FRONT
TOP
DETAIL A
#1
[Clean]
Moistened cloth
Rubber roller x2
FRONT
TOP
FR9H6927.EPS

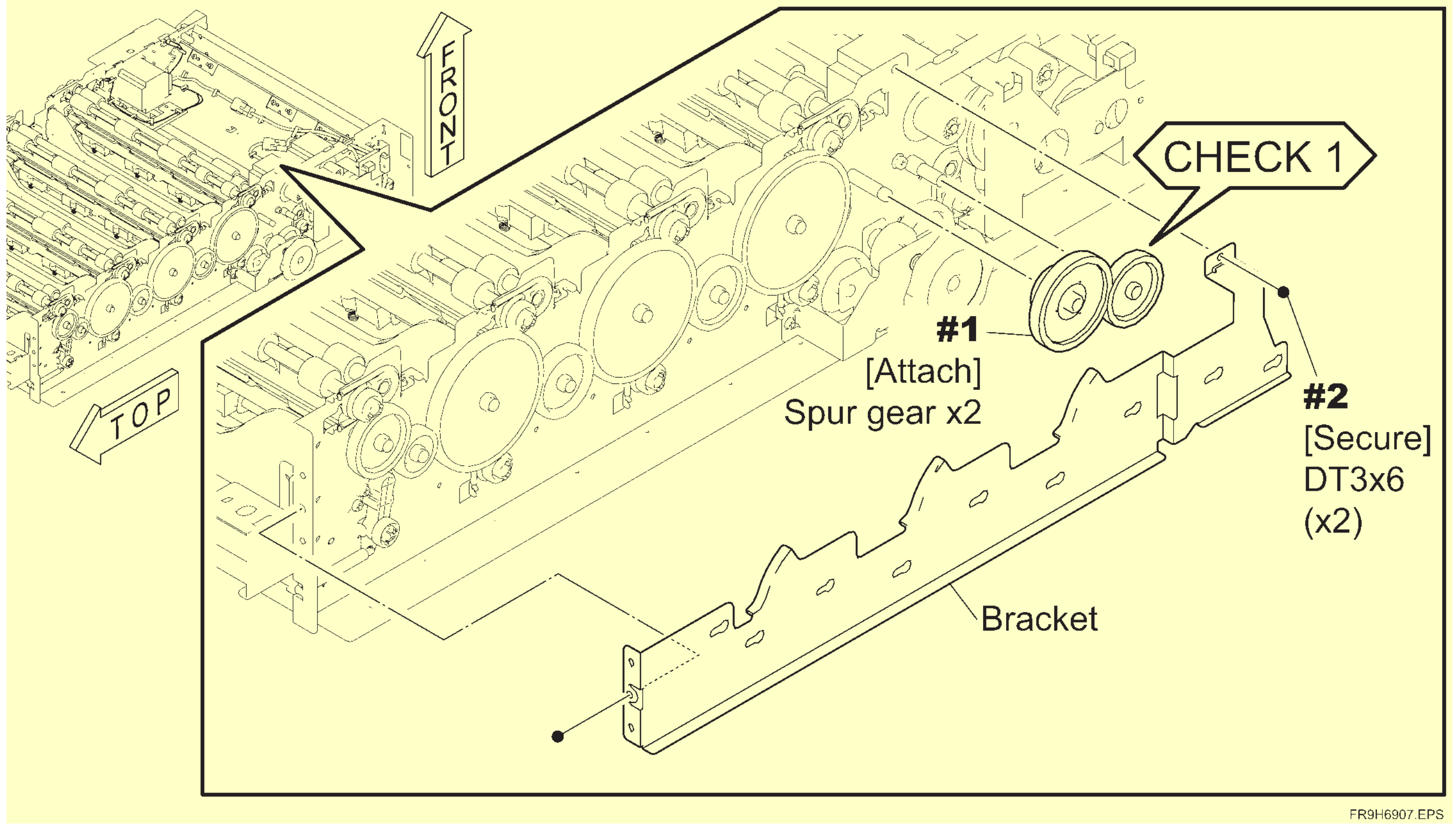
7. **Reinstall the shock-absorbing roller assembly in reverse order of removal.**

8. **Repeat steps 3 through 7 to clean the shock-absorbing roller, rubber roller, and guide located on the second, third, and fourth shelves.**

9. **Reinstall the motor (MB1).**

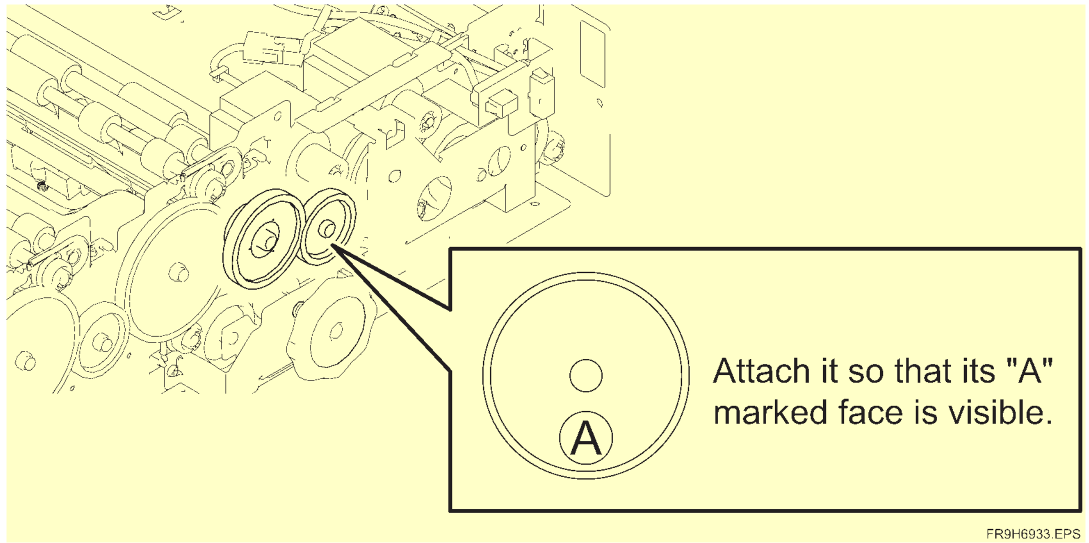

FRONT
TOP
#2
[Connect]
Connector (MB1)
MB1
#3
[Secure]
Clamp x2
#1
[Secure]
BR4x8
(x2)
FR9H6906.EPS

10. Attach the spur gears and brackets.


FRONT
TOP
CHECK 1
#1
[Attach]
Spur gear x2
#2
[Secure]
DT3x6
(x2)
Bracket
FR9H6907.EPS

- **CHECK1**

  Make sure that the spur gears are attached in such an orientation as illustrated below.


A
Attach it so that its "A" marked face is visible.
FR9H6933.EPS

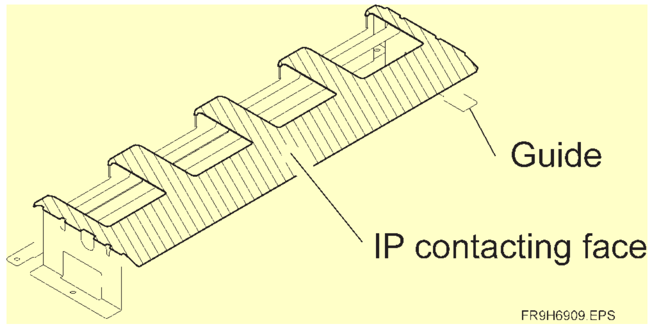
2Y ☞ {PM:8.2}

8.2 Cleaning the Guides and Rubber Rollers

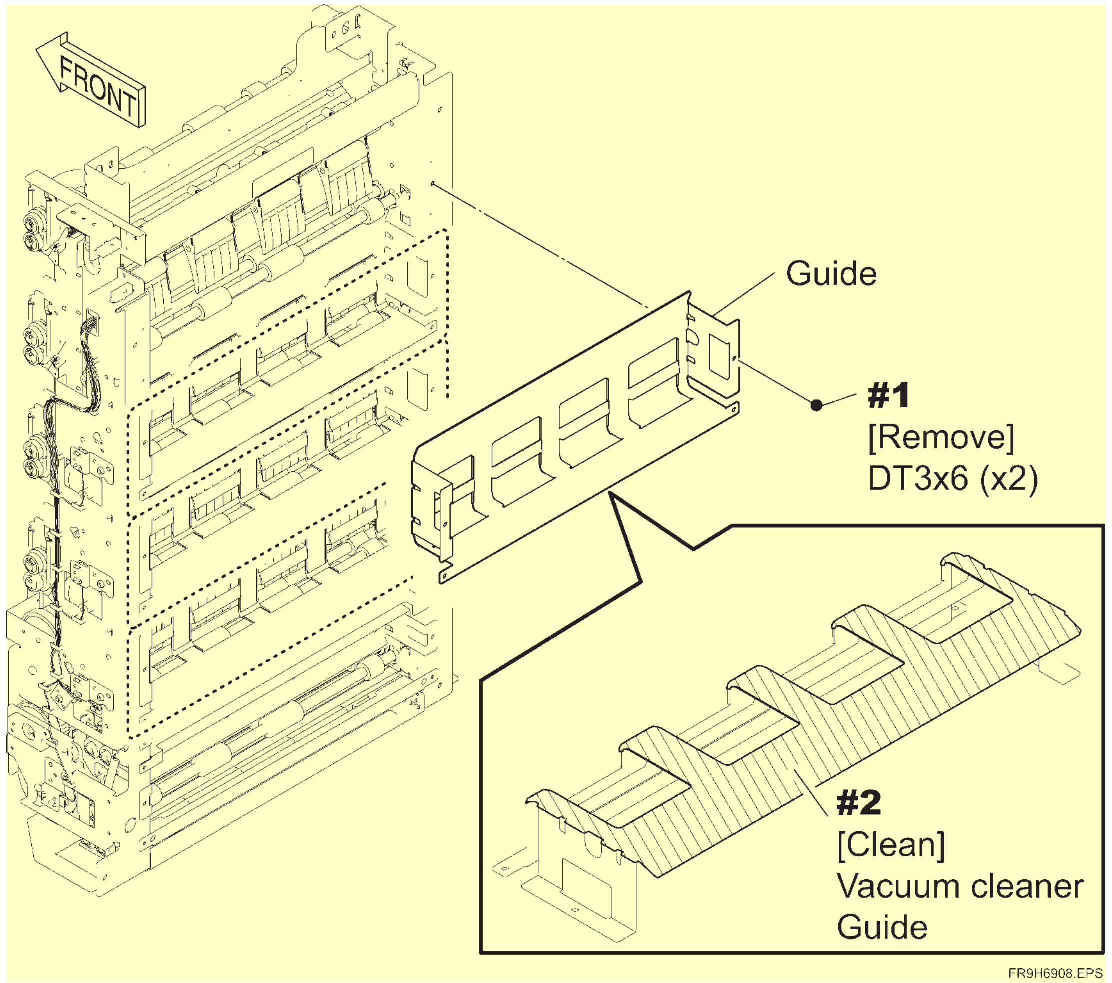
2Y ☞ {PM:8.3}

◆ ***NOTES*** ◆

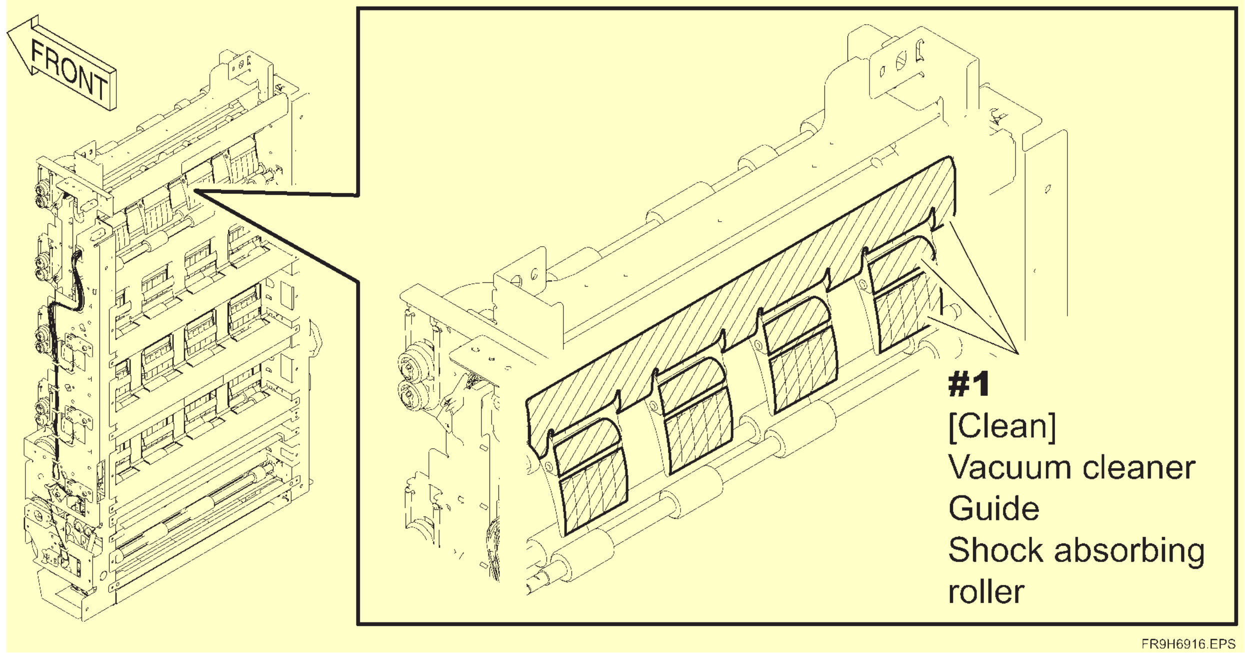
- *Use care not to exert undue force onto the guide. If undue force is applied to it, the guide may be deformed.*
- *Do not place the guide with its IP contacting face down. The contacting face may be scratched or soiled.*


Guide
IP contacting face
FR9H6909.EPS

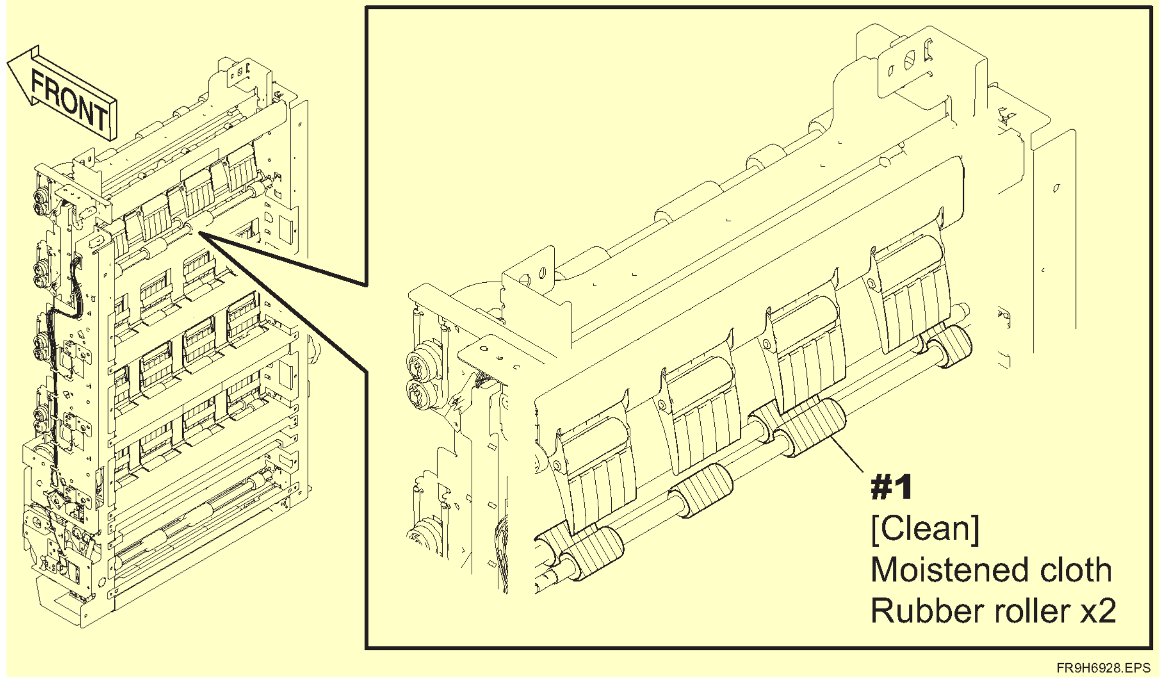
1. **Remove the guide for the first shelf, and clean it by use of a vacuum cleaner.**


FRONT
Guide
#1
[Remove]
DT3x6 (x2)
#2
[Clean]
Vacuum cleaner
Guide
FR9H6908.EPS

2. **Clean the guides and shock absorbing rollers by use of a vacuum cleaner.**


FRONT
#1
[Clean]
Vacuum cleaner
Guide
Shock absorbing roller
FR9H6916.EPS

3. **Wipe the rubber rollers with a moistened cloth.**


FRONT
#1
[Clean]
Moistened cloth
Rubber roller x2
FR9H6928.EPS

4. **Reinstall the guides in reverse order of removal.**

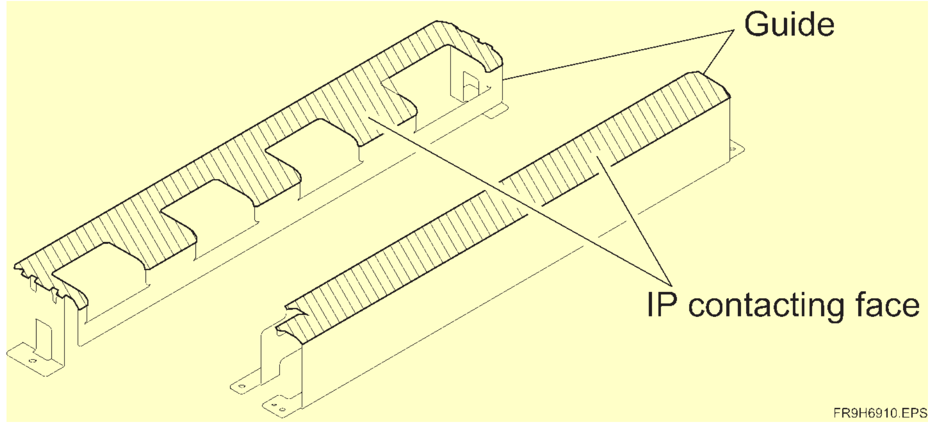
5. **Repeat steps 1 through 4 to clean the shock-absorbing roller, rubber roller, and guide located on the second, third, and fourth shelves.**

8.3 Cleaning the Guides and Rubber Rollers

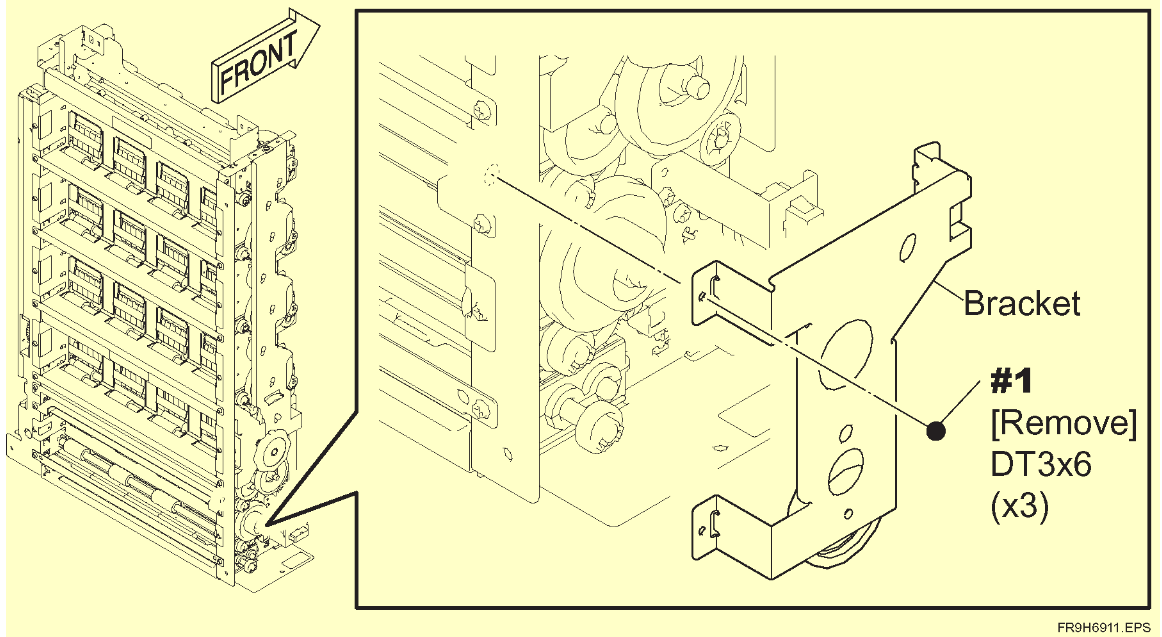
2Y

◆ **NOTES** ◆

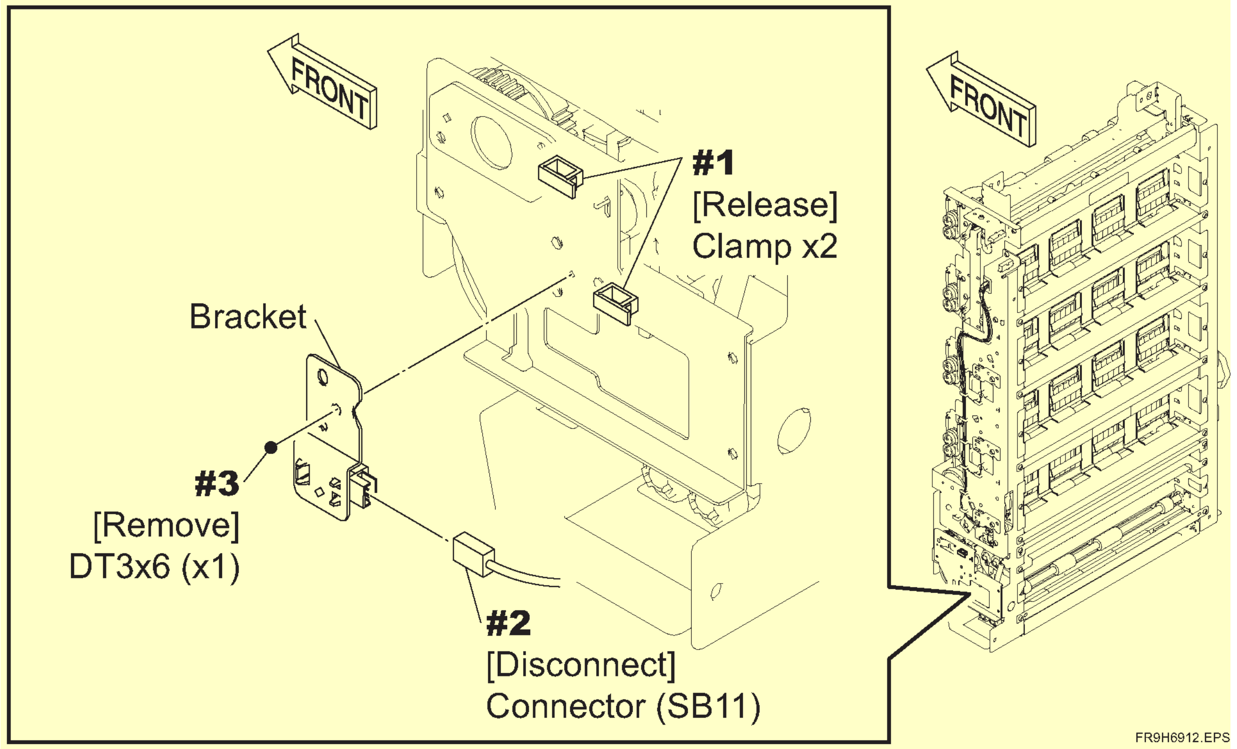
- *Use care not to exert undue force onto the guide. If undue force is applied to it, the guide may be deformed.*
- *Do not place the guide with its IP contacting face down. The contacting face may be scratched or soiled.*


Guide
IP contacting face
FR9H6910.EPS

1. **Remove the bracket.**


FRONT
Bracket
#1
[Remove]
DT3x6
(x3)
FR9H6911.EPS

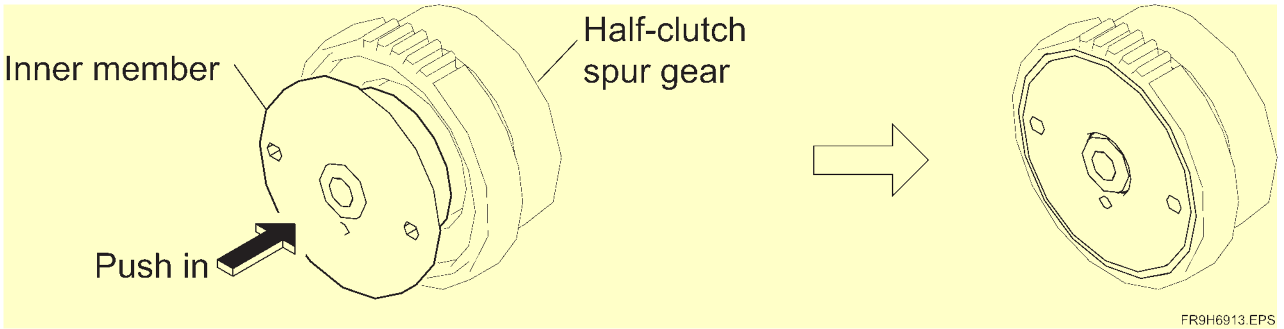
2. **Remove another bracket.**

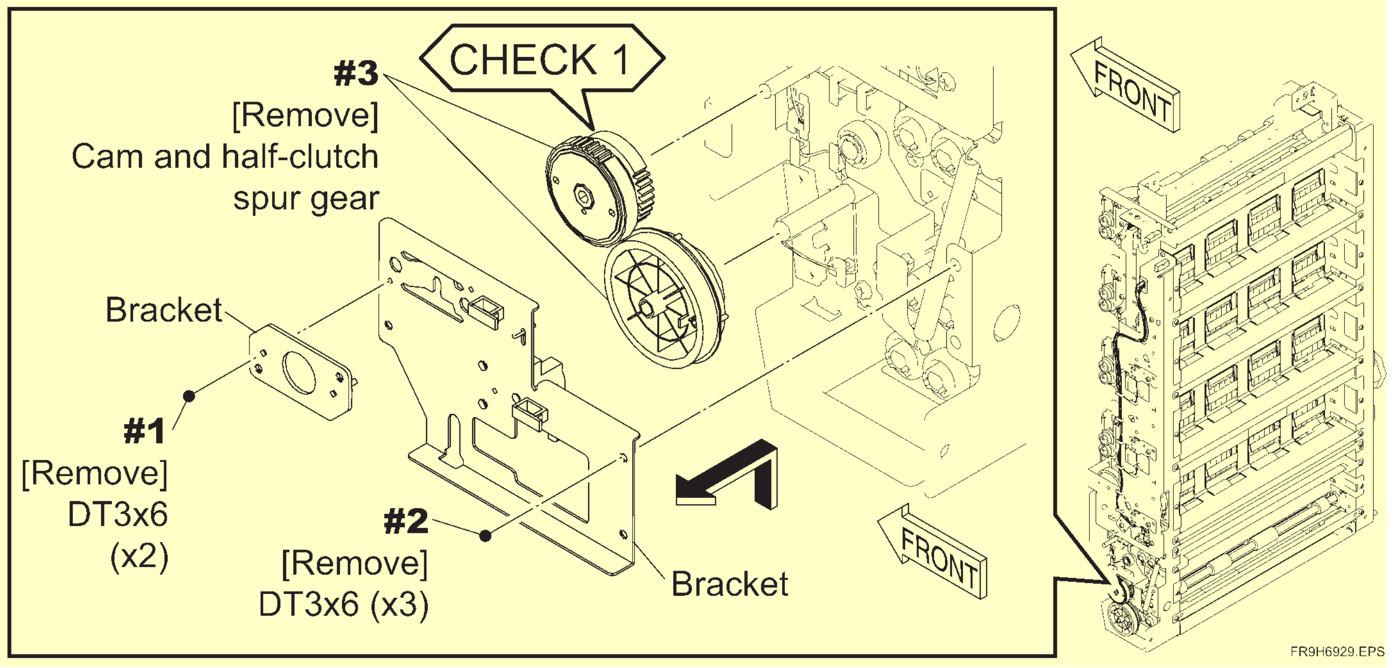

FRONT
FRONT
#1
[Release]
Clamp x2
Bracket
#3
[Remove]
DT3x6 (x1)
#2
[Disconnect]
Connector (SB11)
FR9H6912.EPS

3. Remove the cam and half-clutch spur gear.

◆ NOTE ◆

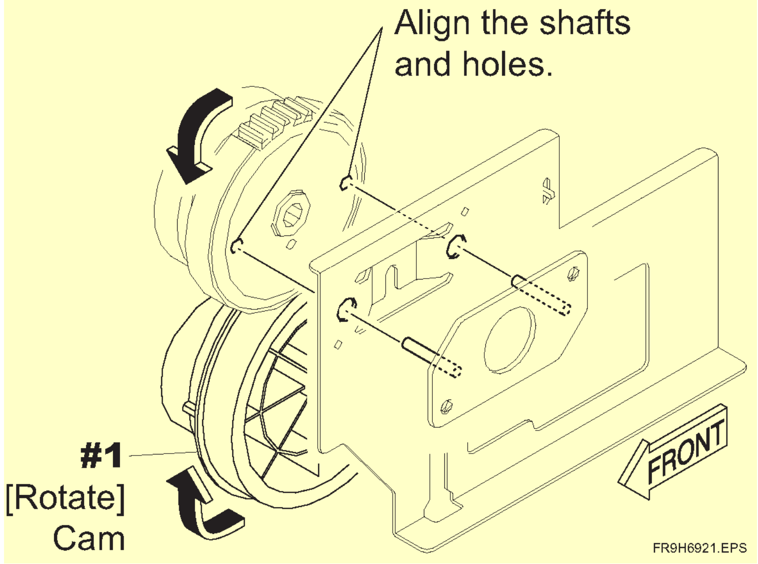
The inner member of the half-clutch spur gear may pop out. If the inner member pops out, push it back where it was. If the inner member is removed, it may cause trouble or failure.


Inner member
Half-clutch spur gear
Push in
FR9H6913.EPS


CHECK 1
#3
[Remove]
Cam and half-clutch spur gear
Bracket
#1
[Remove]
DT3x6
(x2)
#2
[Remove]
DT3x6 (x3)
Bracket
FRONT
FRONT
FR9H6929.EPS

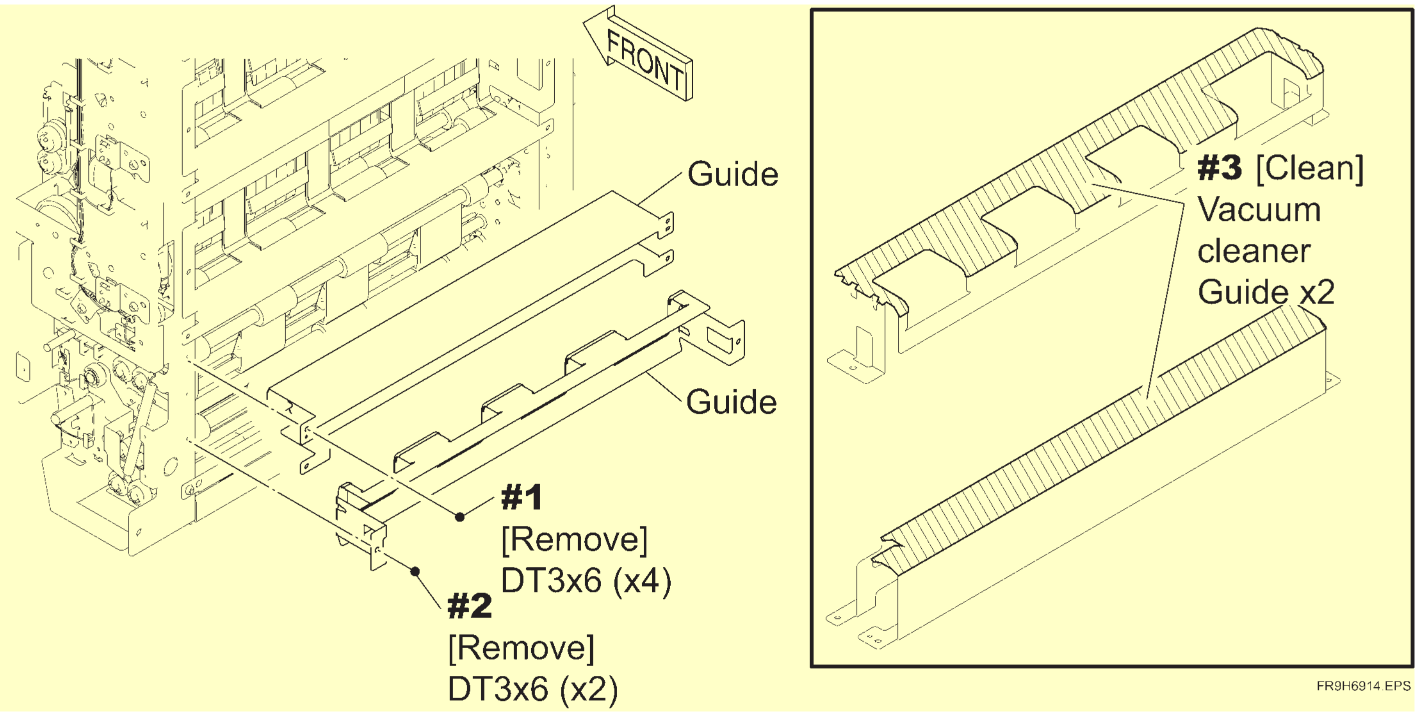
- **CHECK 1**

When attaching the half-clutch spur gear retaining bracket, align the positions of the half-clutch spur gear, bracket holes, and the bracket shafts.

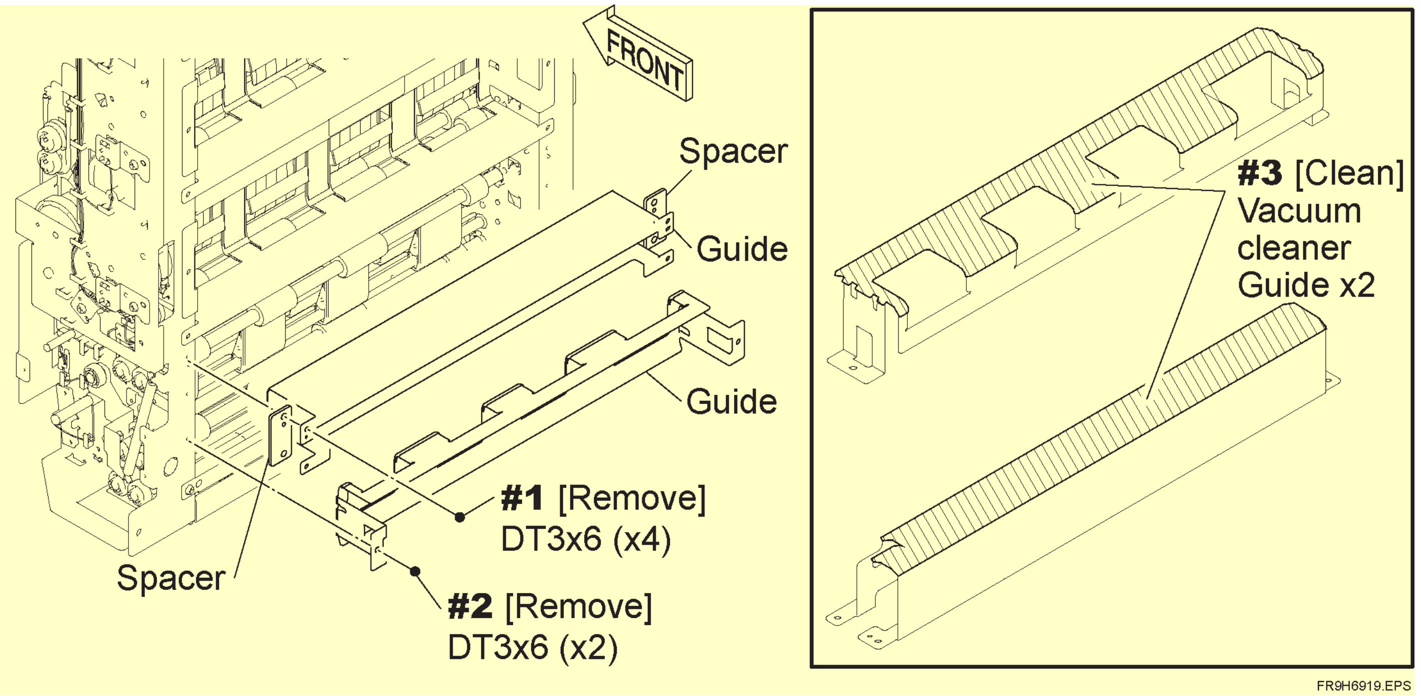

Align the shafts and holes.
#1
[Rotate]
Cam
FRONT
FR9H6921.EPS

4. **Remove the guides and clean them by use of a vacuum cleaner.**

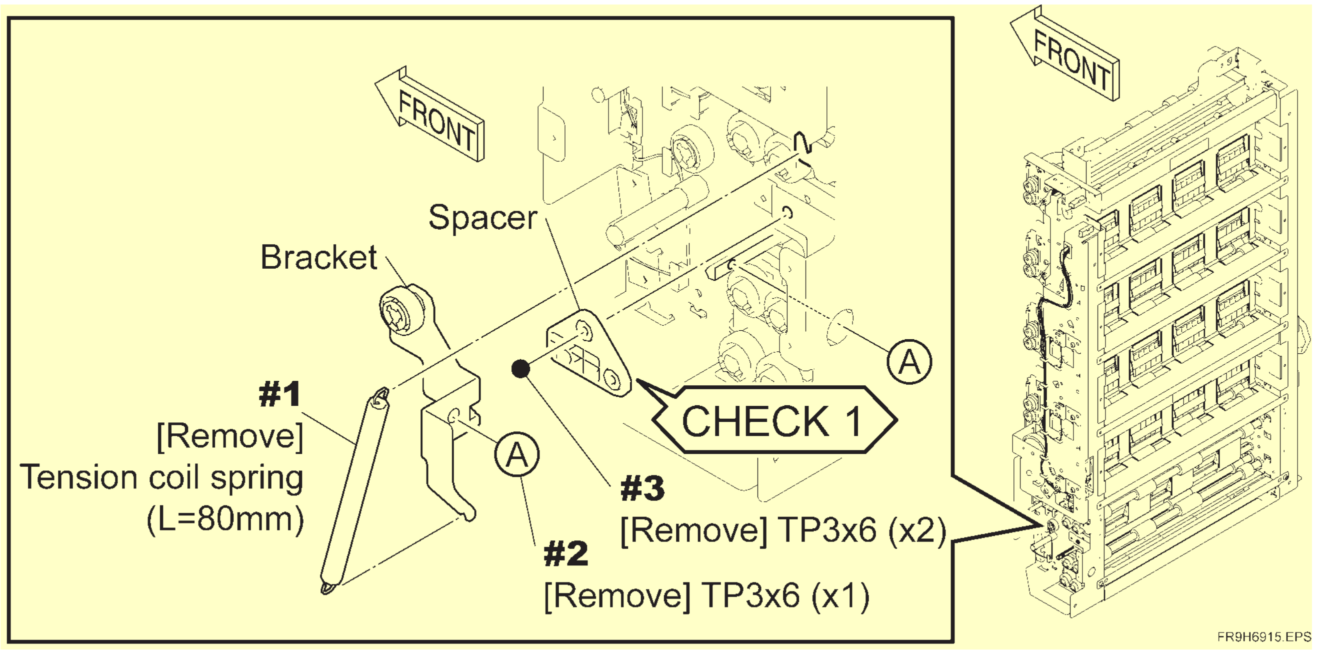
- **Without spacer**


FRONT
Guide
Guide
#1
[Remove]
DT3x6 (x4)
#2
[Remove]
DT3x6 (x2)
#3 [Clean]
Vacuum
cleaner
Guide x2
FR9H6914.EPS

- **With spacer**

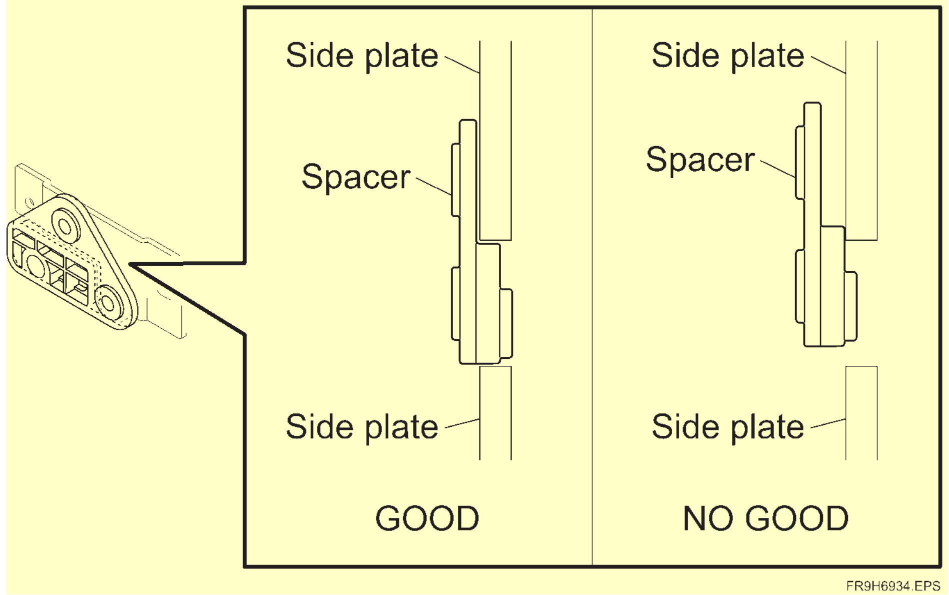

FRONT
Spacer
Guide
Guide
Spacer
#1 [Remove]
DT3x6 (x4)
#2 [Remove]
DT3x6 (x2)
#3 [Clean]
Vacuum
cleaner
Guide x2
FR9H6919.EPS

5. **Remove the spacer.**

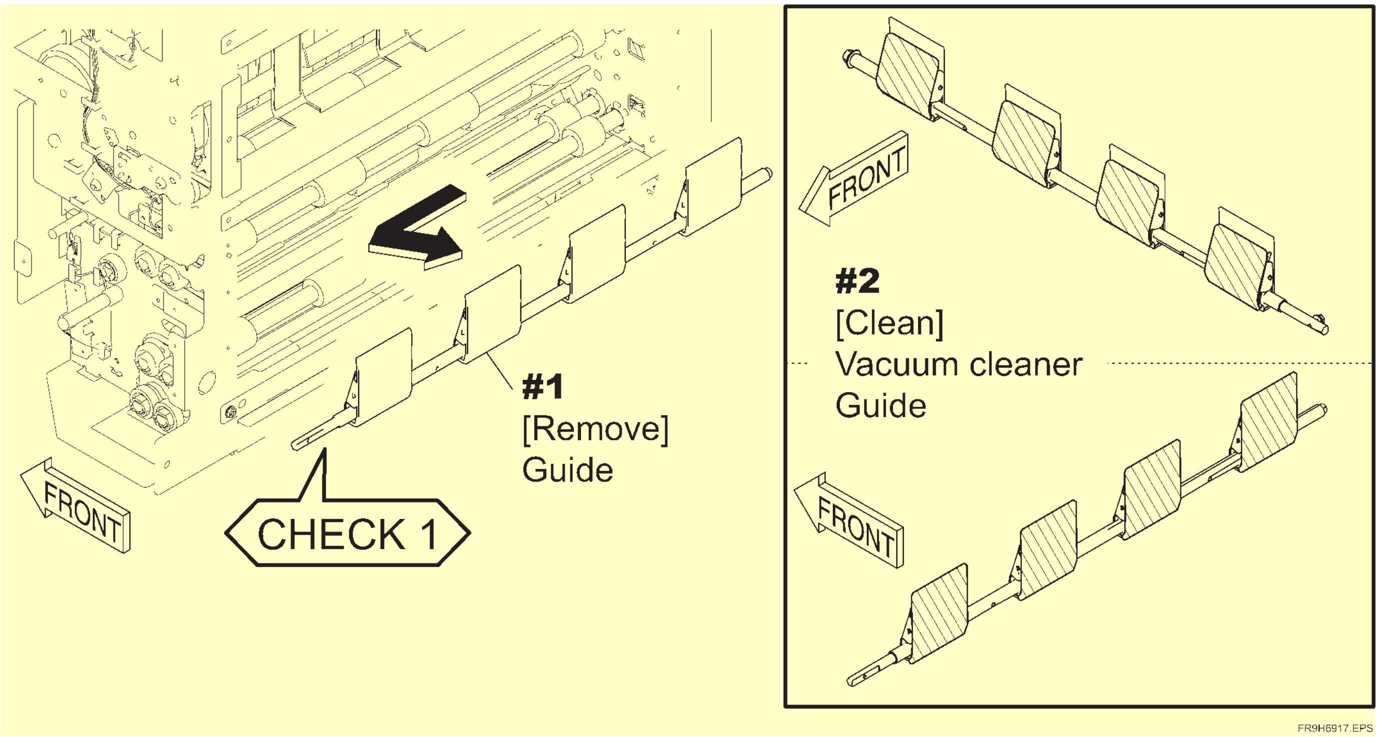

FRONT
Spacer
Bracket
#1
[Remove]
Tension coil spring
(L=80mm)
A
A
CHECK 1
#3
[Remove] TP3x6 (x2)
#2
[Remove] TP3x6 (x1)
FRONT
FR9H6915.EPS

- **CHECK 1**

Make sure that the spacer is attached properly.

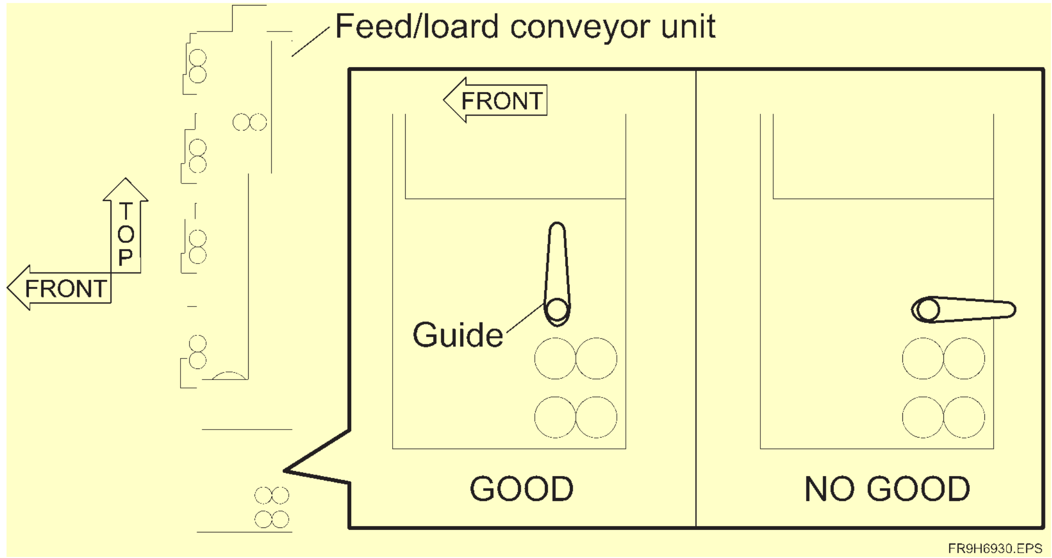

Side plate
Spacer
Side plate
GOOD
Side plate
Spacer
Side plate
NO GOOD
FR9H6934.EPS

6. Remove the guides and clean them by use of a vacuum cleaner.

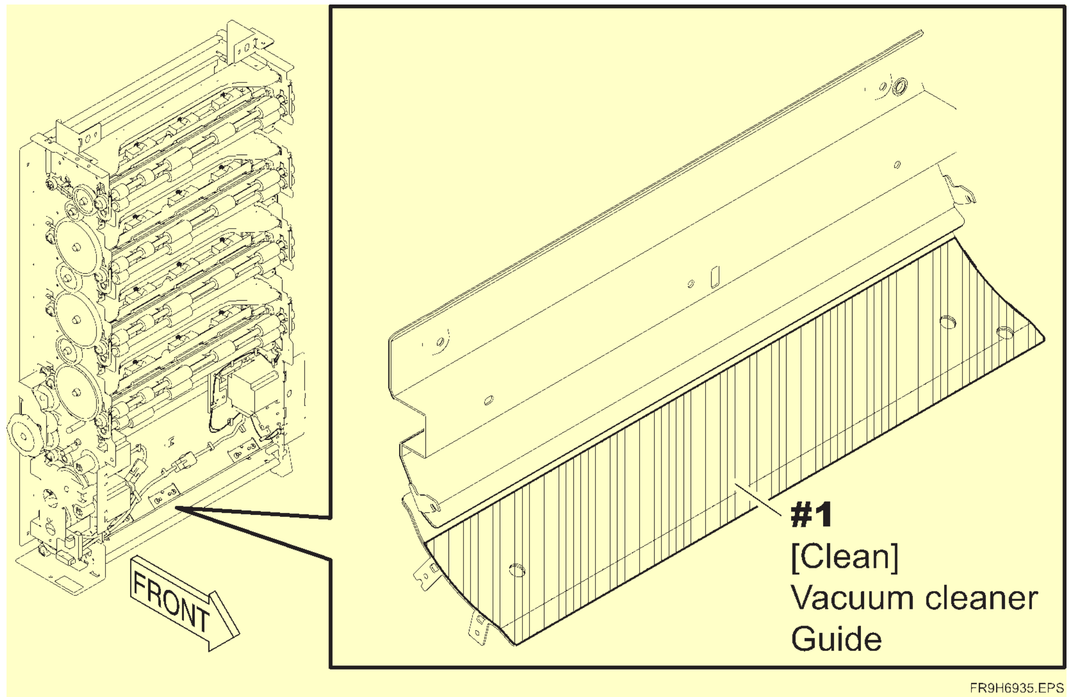

FRONT
CHECK 1
#1
[Remove]
Guide
FRONT
#2
[Clean]
Vacuum cleaner
Guide
FRONT
FR9H6917.EPS

- **CHECK 1**

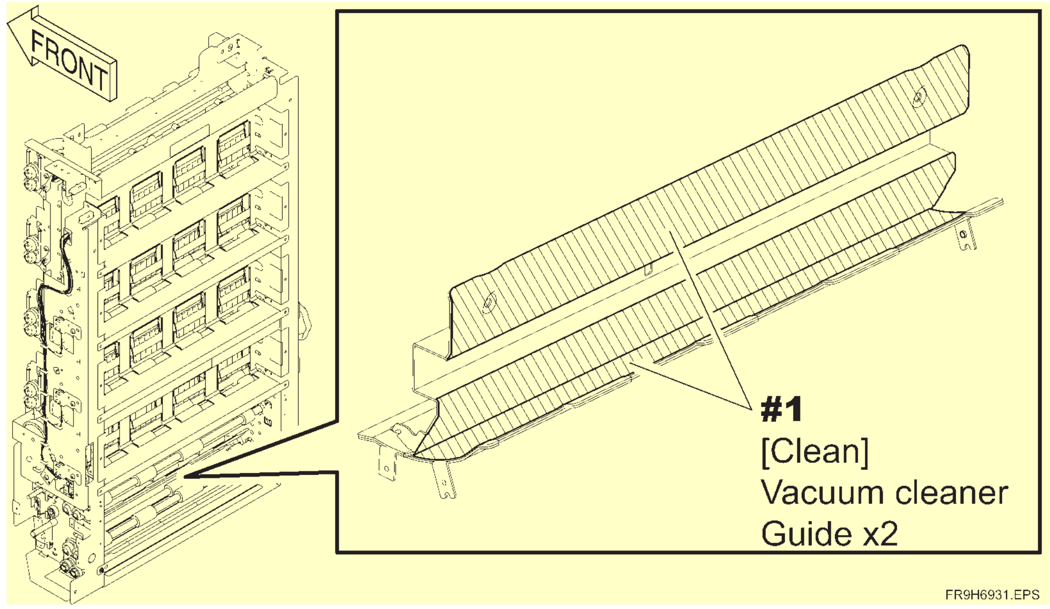
  When attaching the guide, do so in such an orientation as illustrated below.
  Unless this guide is attached properly, other guides could not be attached.


Feed/loard conveyor unit
FRONT
TOP
FRONT
Guide
GOOD
NO GOOD
FR9H6930.EPS

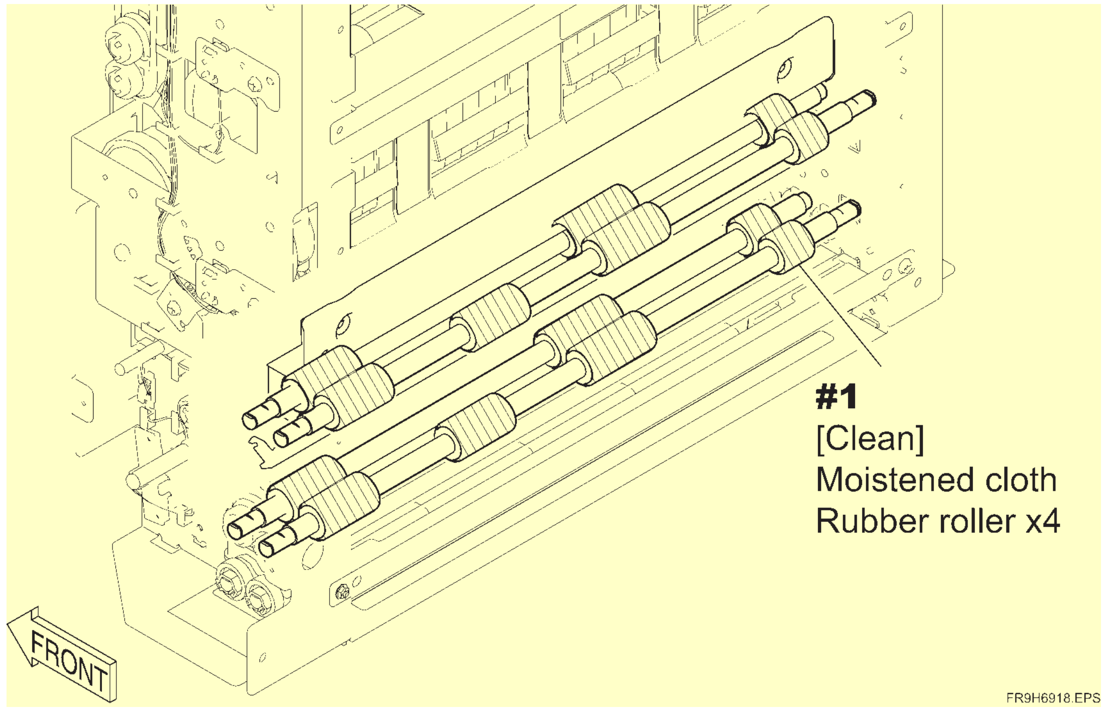
7. Clean the guide by use of a vacuum cleaner.


FRONT
#1
[Clean]
Vacuum cleaner
Guide
FR9H6935.EPS

8. Clean the guides by use of a vacuum cleaner.


FRONT
#1
[Clean]
Vacuum cleaner
Guide x2
FR9H6931.EPS

9. **Wipe the rubber rollers with a moistened cloth.**



#1
[Clean]
Moistened cloth
Rubber roller x4

10. **Reinstall the guides in reverse order of removal.**

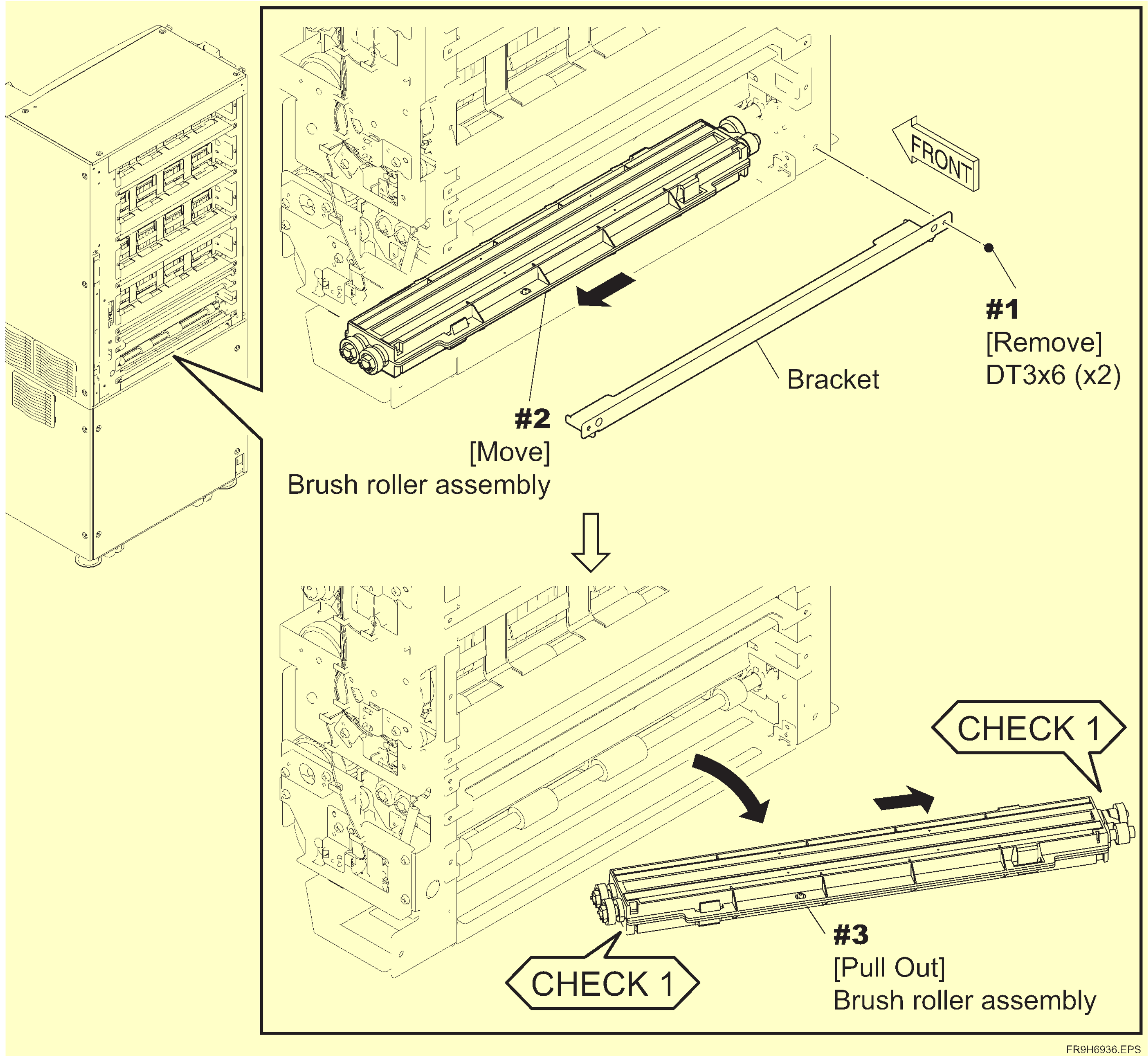
2Y ☞ {PM:8.4.2}

8.4 Brush Roller

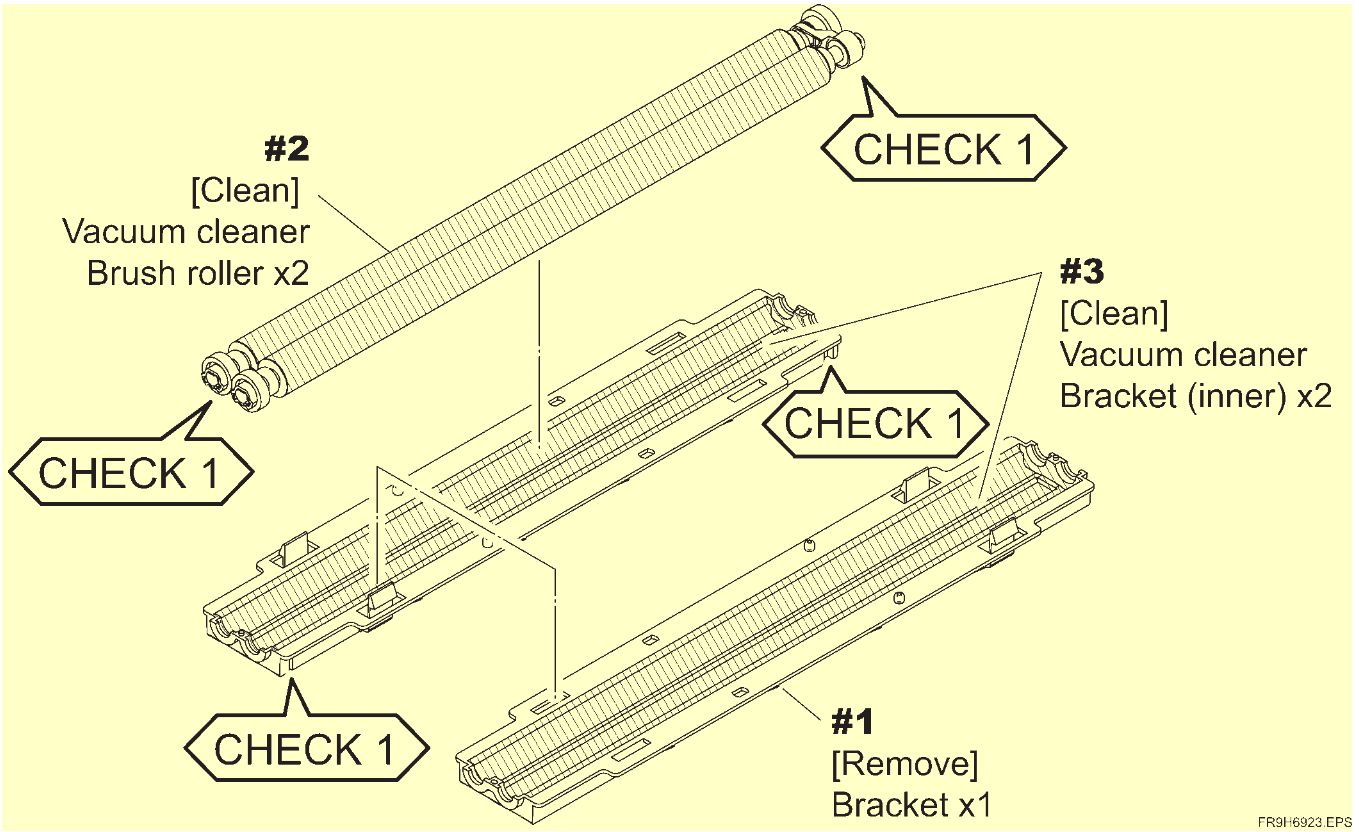
8.4.1 Cleaning the Brush Roller

1Y 3Y ☞ {PM:13.1}

1. **Remove the brush roller assembly.**


FRONT
Bracket
#1
[Remove]
DT3x6 (x2)
#2
[Move]
Brush roller assembly
CHECK 1
CHECK 1
#3
[Pull Out]
Brush roller assembly
FR9H6936.EPS

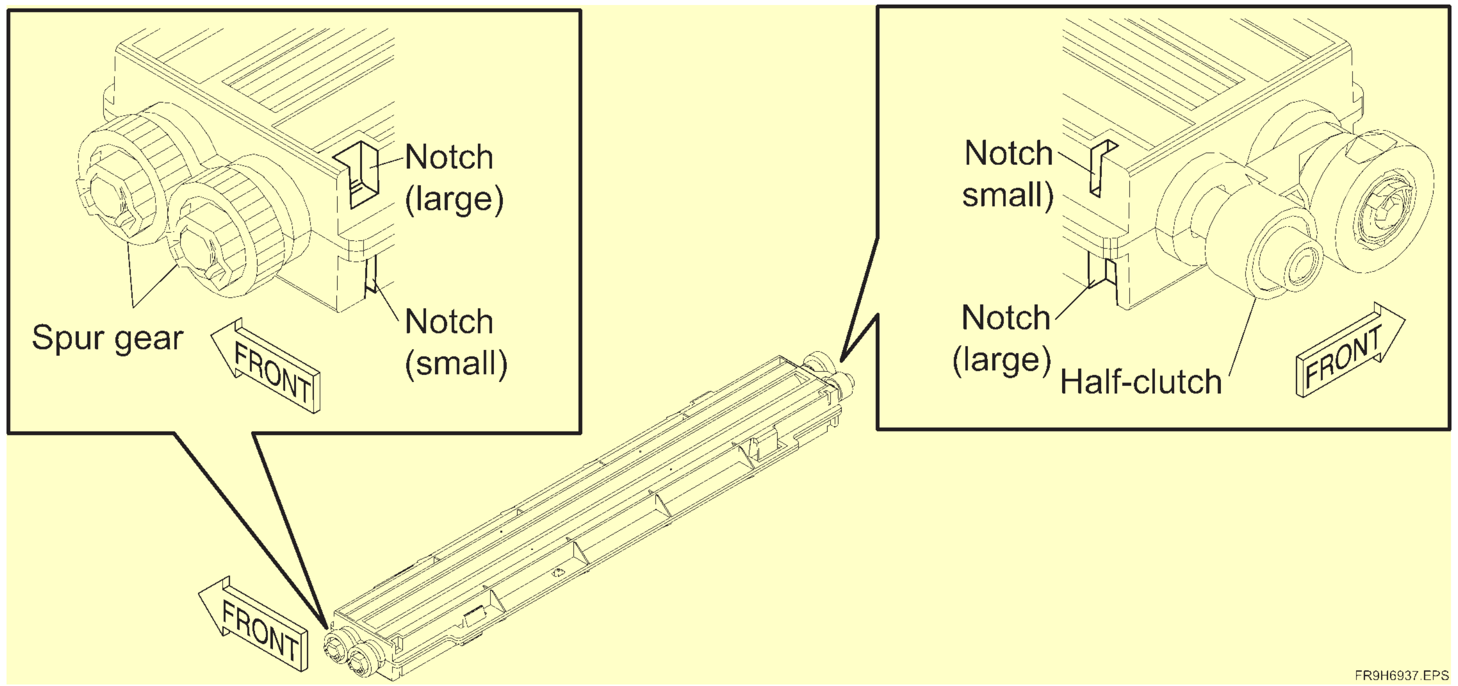
2. **Clean the brush rollers and brackets by use of a vacuum cleaner.**


#2
[Clean]
Vacuum cleaner
Brush roller x2
CHECK 1
#3
[Clean]
Vacuum cleaner
Bracket (inner) x2
CHECK 1
CHECK 1
CHECK 1
#1
[Remove]
Bracket x1
FR9H6923.EPS

3. **Reinstall the brush roller assembly in reverse order of removal.**

- **CHECK 1**

  Make sure that the brush roller assembly and brush rollers are attached in their correct orientations.

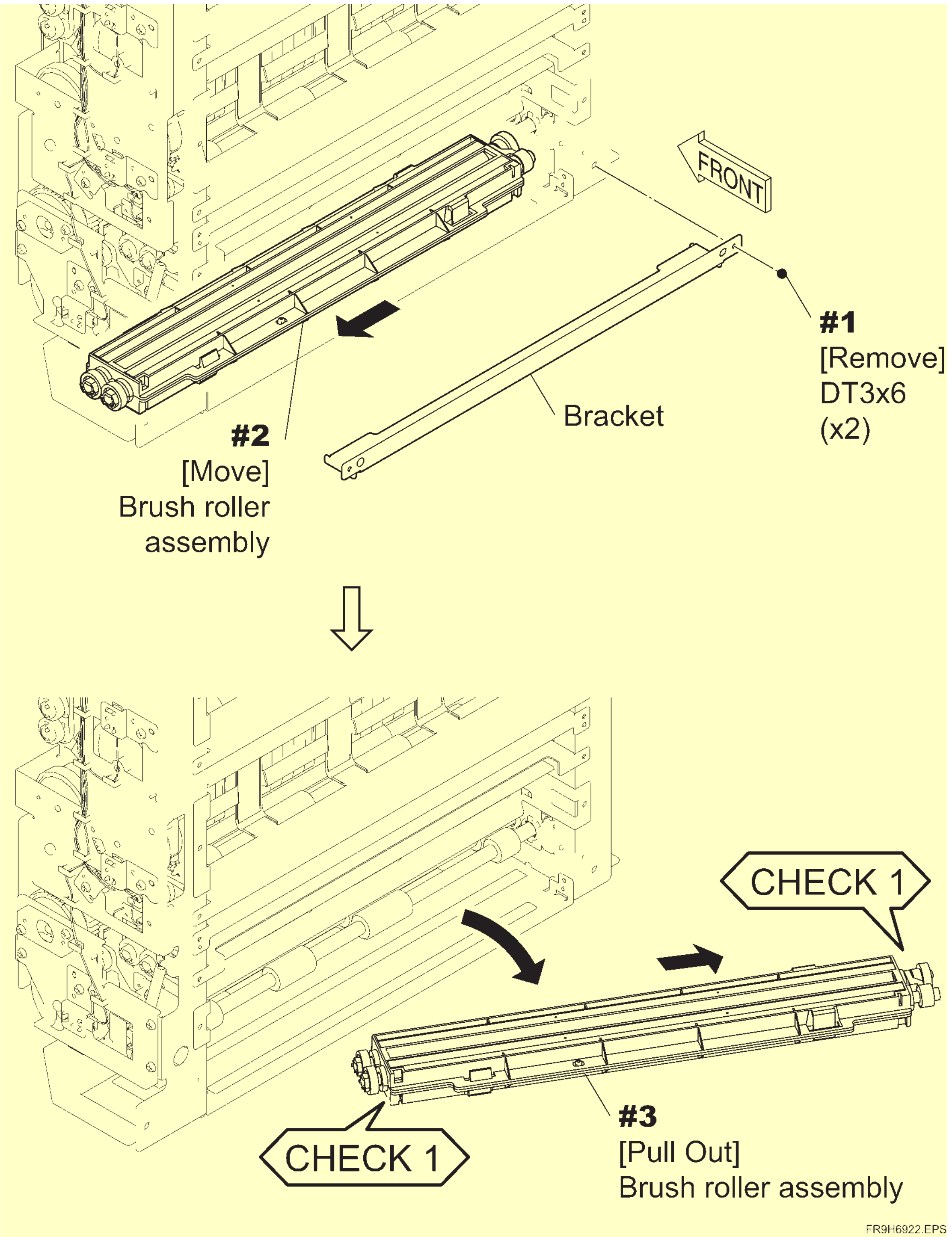

Notch
(large)
Spur gear
FRONT
Notch
(small)
Notch
small)
Notch
(large)
Half-clutch
FRONT
FRONT
FR9H6937.EPS

8.4.2 Cleaning/Replacing the Brush Roller

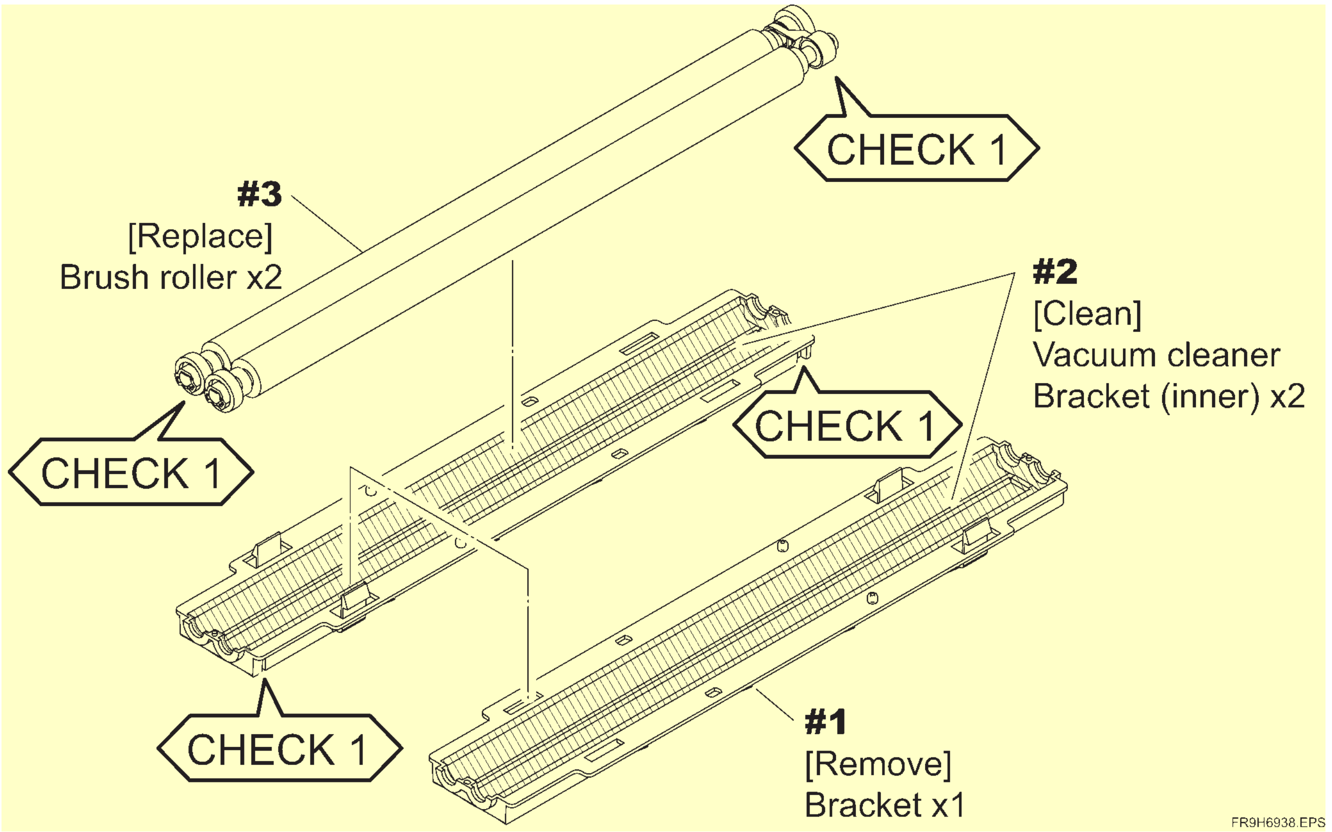
#20001 or later : 2Y ☞ {PM:8.5}

#50001 or later : 3Y ☞ {PM:8.6}

1. **Remove the brush roller assembly.**


FRONT
#1
[Remove]
DT3x6
(x2)
Bracket
#2
[Move]
Brush roller
assembly
CHECK 1
CHECK 1
#3
[Pull Out]
Brush roller assembly
FR9H6922.EPS

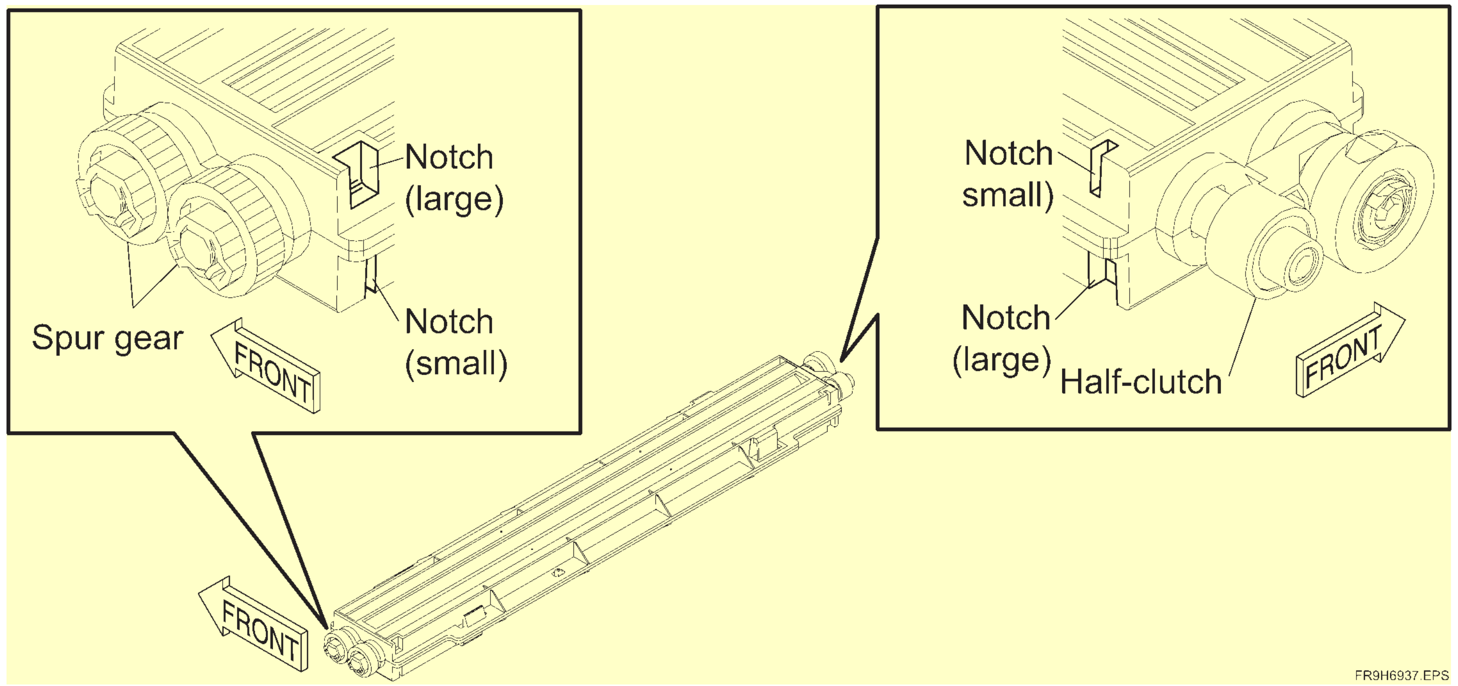
2. **Clean the brush rollers and brackets by use of a vacuum cleaner.**


CHECK 1
#3
[Replace]
Brush roller x2
#2
[Clean]
Vacuum cleaner
Bracket (inner) x2
CHECK 1
CHECK 1
CHECK 1
#1
[Remove]
Bracket x1
FR9H6938.EPS

3. **Reinstall the brush roller assembly in reverse order of removal.**

- **CHECK 1**

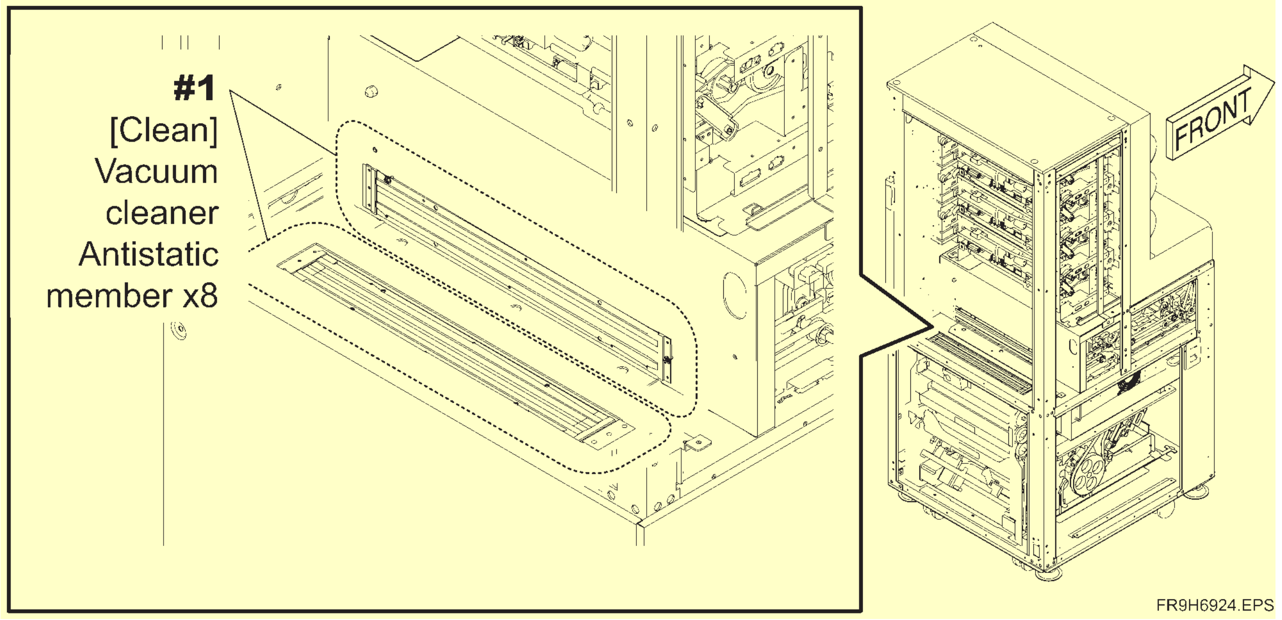
Make sure that the brush roller assembly and brush rollers are attached in their correct orientations.


Notch
(large)
Spur gear
FRONT
Notch
(small)
Notch
small)
Notch
(large)
Half-clutch
FRONT
FRONT
FR9H6937.EPS

8.5 Cleaning the Antistatic Members

2Y ☞ {PM:8.6}

1. **Clean the antistatic members by use of a vacuum cleaner.**


#1
[Clean]
Vacuum
cleaner
Antistatic
member x8
FRONT
FR9H6924.EPS

8.6 Reinstalling the Feed/Load Conveyor Unit

#20001 or later : 2Y

#50001 or later : 3Y

◆ ***NOTE*** ◆

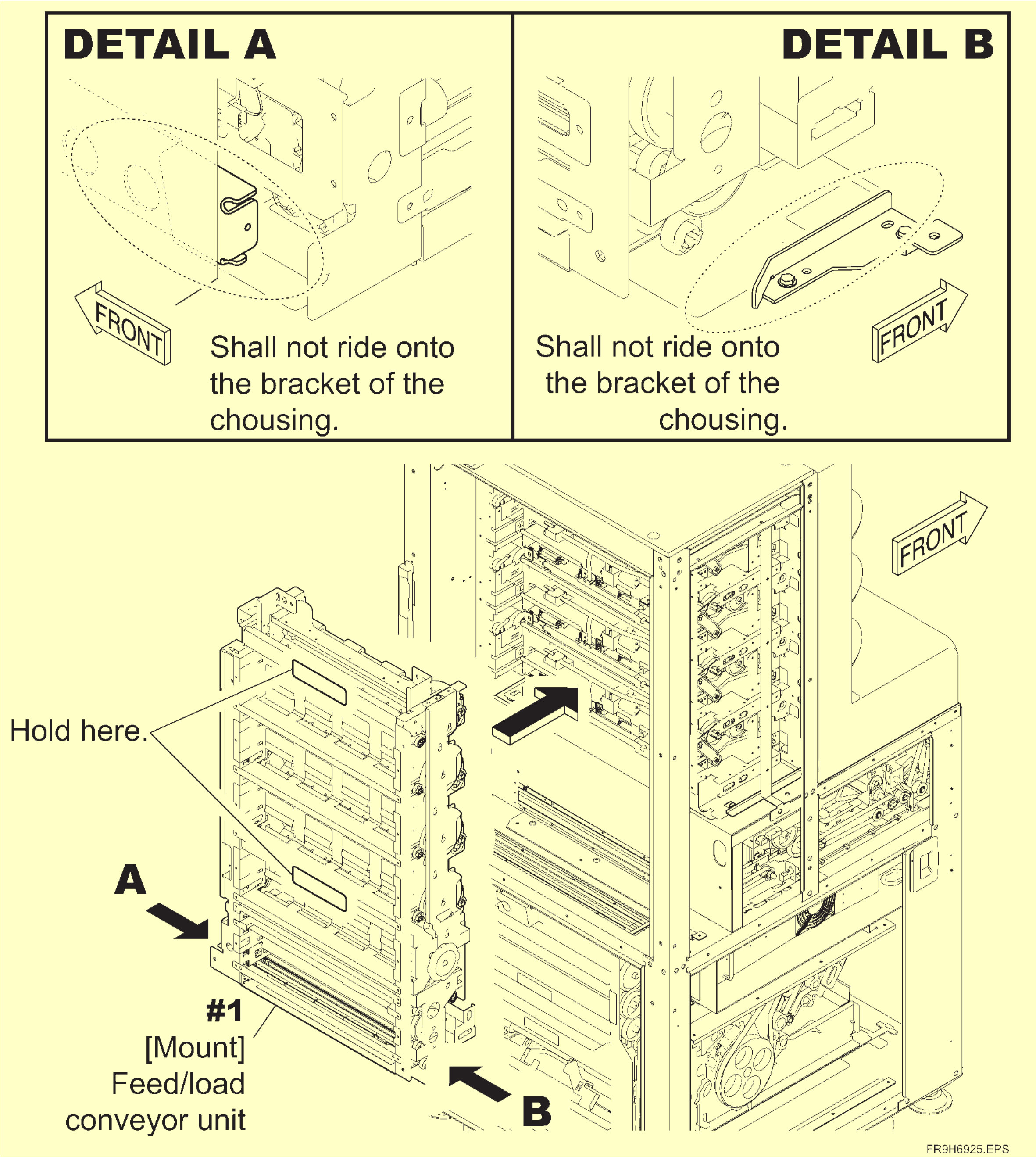
Because the feed/load conveyor unit is heavy, pay attention to the following points when moving and installing it.

- *Before proceeding with the procedures,secure sufficient working space around the machine.*
- *Get hold of the portions indicated by the "Hold Here" labels.*
- *While assuming a comfortable posture,lift or hold up the unit.*

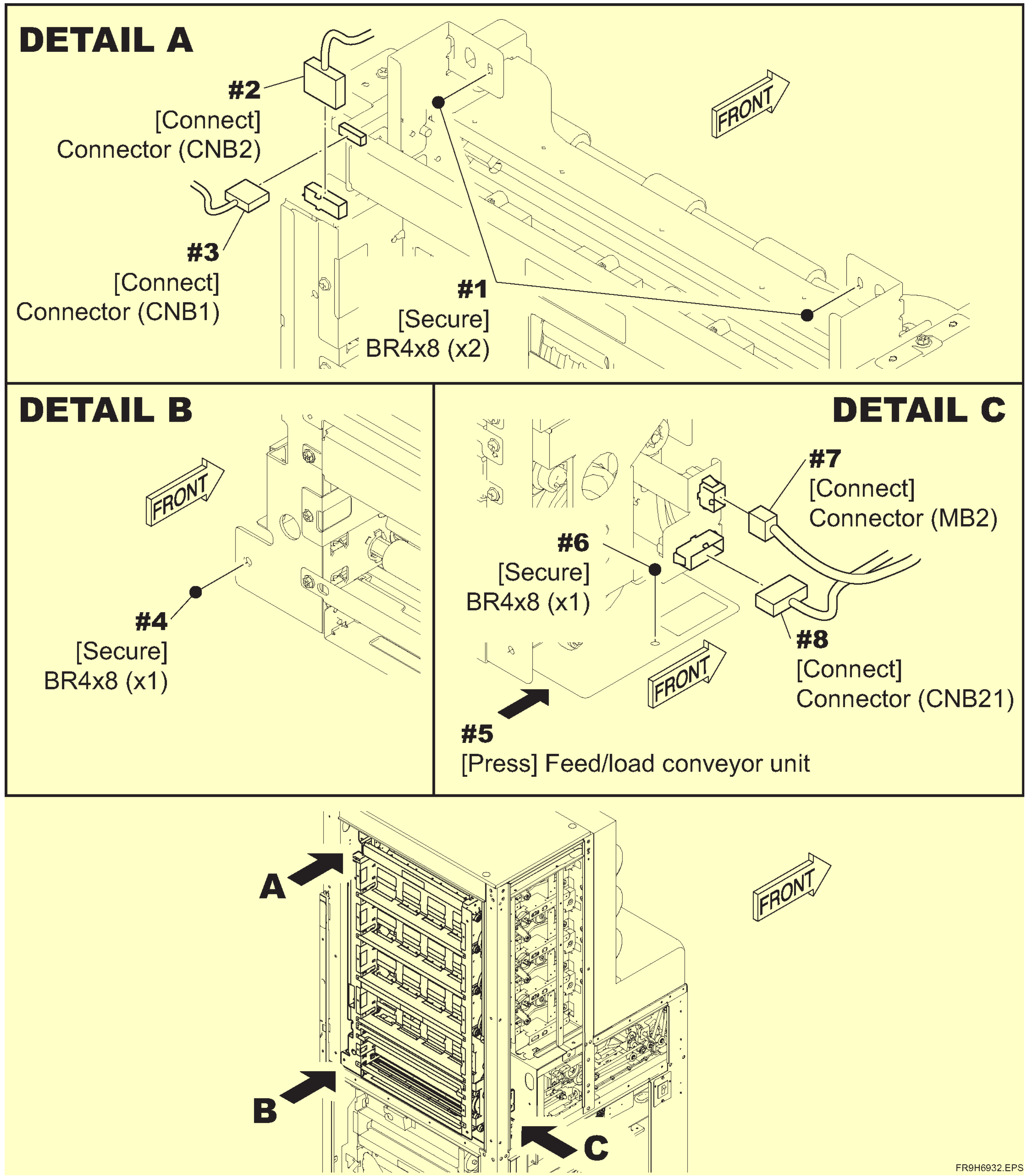
1. Mount the feed/load conveyor unit onto the housing.

◆ ***NOTE*** ◆

Use care so that the side plate bottom portions of the feed/load conveyor unit do not ride onto the brackets of the housing.


DETAIL A
FRONT
Shall not ride onto the bracket of the chousing.
DETAIL B
Shall not ride onto the bracket of the chousing.
FRONT
FRONT
Hold here.
A
#1
[Mount] Feed/load conveyor unit
B
FR9H6925.EPS

2. Secure the feed/load conveyor unit in place.


DETAIL A
#2
[Connect] Connector (CNB2)
#3
[Connect] Connector (CNB1)
#1
[Secure] BR4x8 (x2)
FRONT
DETAIL B
FRONT
#4
[Secure] BR4x8 (x1)
DETAIL C
#7
[Connect] Connector (MB2)
#6
[Secure] BR4x8 (x1)
#8
[Connect] Connector (CNB21)
FRONT
#5
[Press] Feed/load conveyor unit
A
B
C
FRONT
FR9H6932.EPS

3. Check to ensure that the screws once removed are snugly retained.

#20001 or later : 2Y ☞ {PM:9.1}

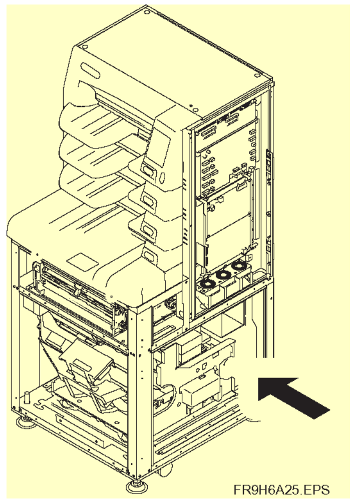
#50001 or later : 3Y ☞ {PM:13.1}

9. Side-Positioning Conveyor Unit

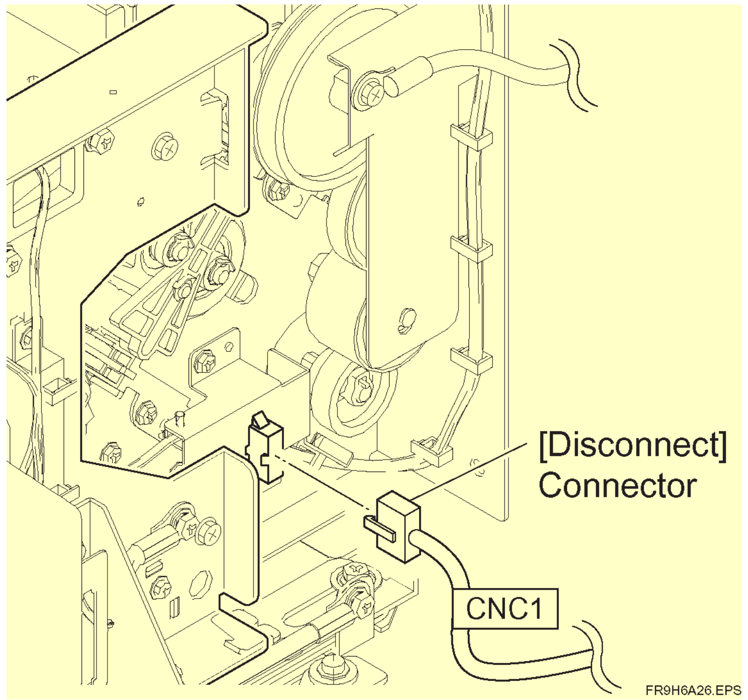
9.1 Removing the Side-Positioning Conveyor Unit

2Y **3Y**

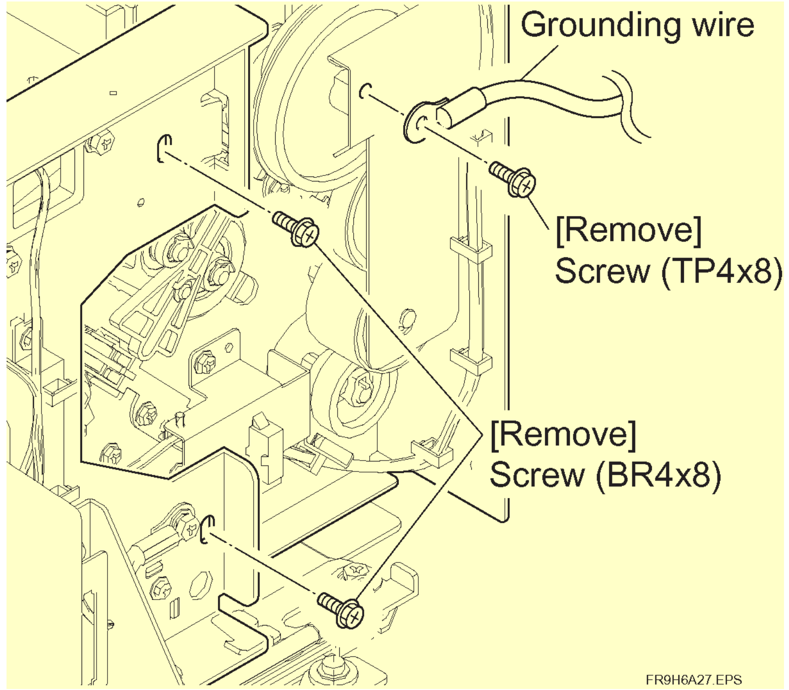
1. **Carry out the operations in the steps 2 and 3 from the direction indicated by the arrow in the figure below.**


FR9H6A25.EPS

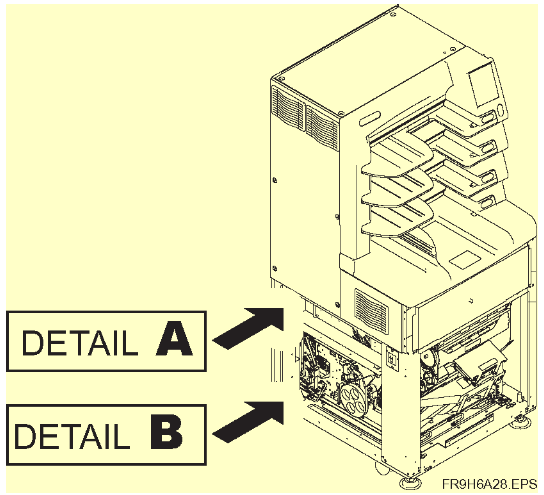
2. **Disconnect the connector.**


[Disconnect]
Connector
CNC1
FR9H6A26.EPS

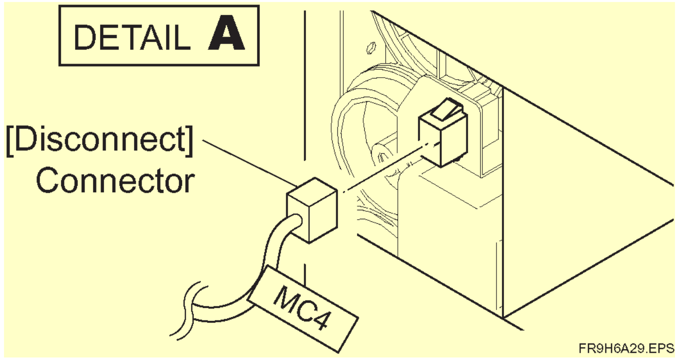
3. **Remove the screws.**


Grounding wire
[Remove]
Screw (TP4x8)
[Remove]
Screw (BR4x8)
FR9H6A27.EPS

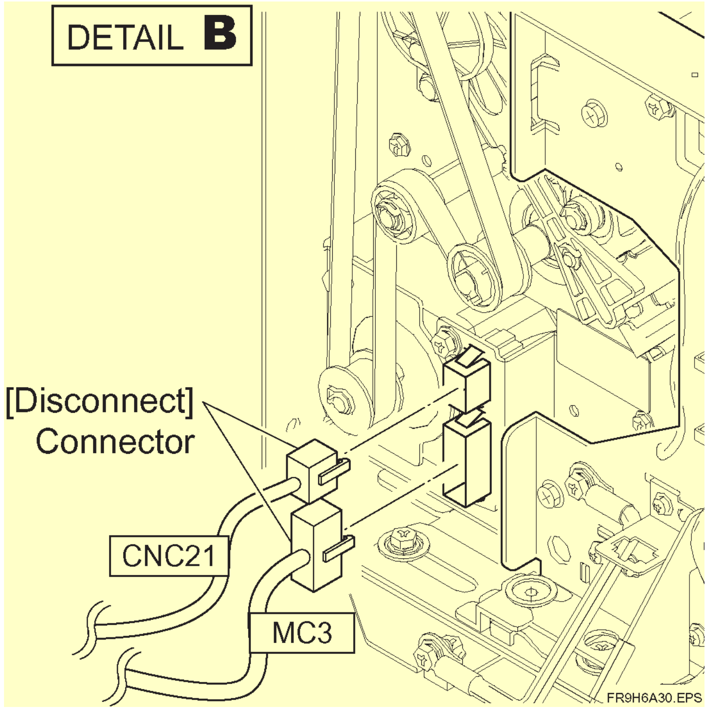
4. **Carry out the operations in the steps 5 to 7 from the direction indicated by the arrow in the figure below.**


DETAIL A
DETAIL B
FR9H6A28.EPS

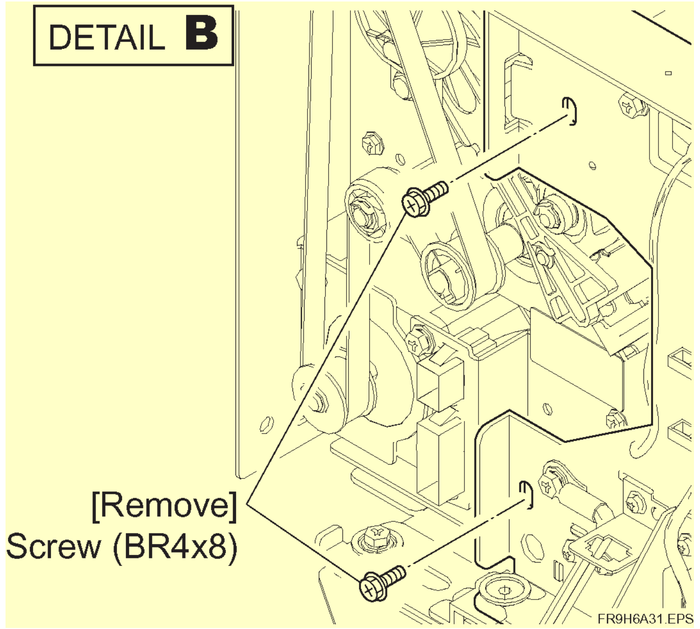
5. **Disconnect the connector.**


DETAIL A
[Disconnect]
Connector
MC4
FR9H6A29.EPS

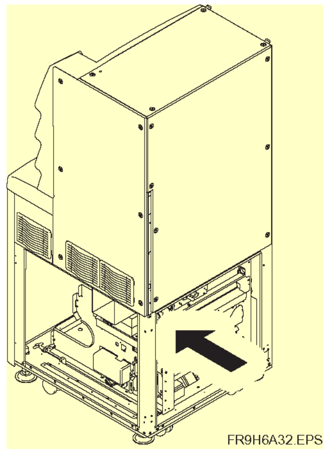
6. **Disconnect the connectors.**


DETAIL B
[Disconnect]
Connector
CNC21
MC3
FR9H6A30.EPS

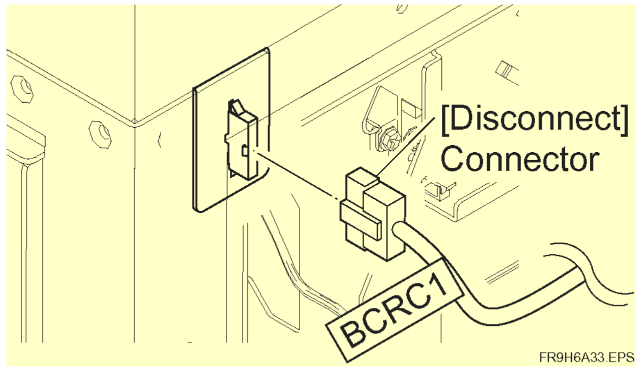
7. **Remove the screws.**


DETAIL B
[Remove]
Screw (BR4x8)
FR9H6A31.EPS

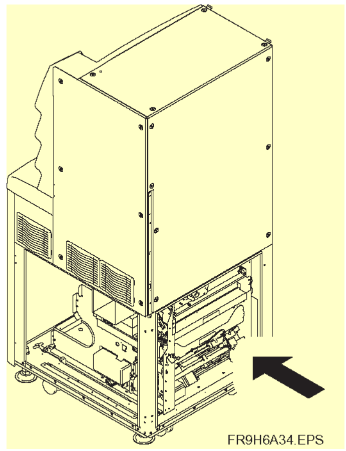
8. **Carry out the operations in the step 9 from the direction indicated by the arrow in the figure below.**


FR9H6A32.EPS

9. **Disconnect the connector.**


[Disconnect]
Connector
BCRC1
FR9H6A33.EPS

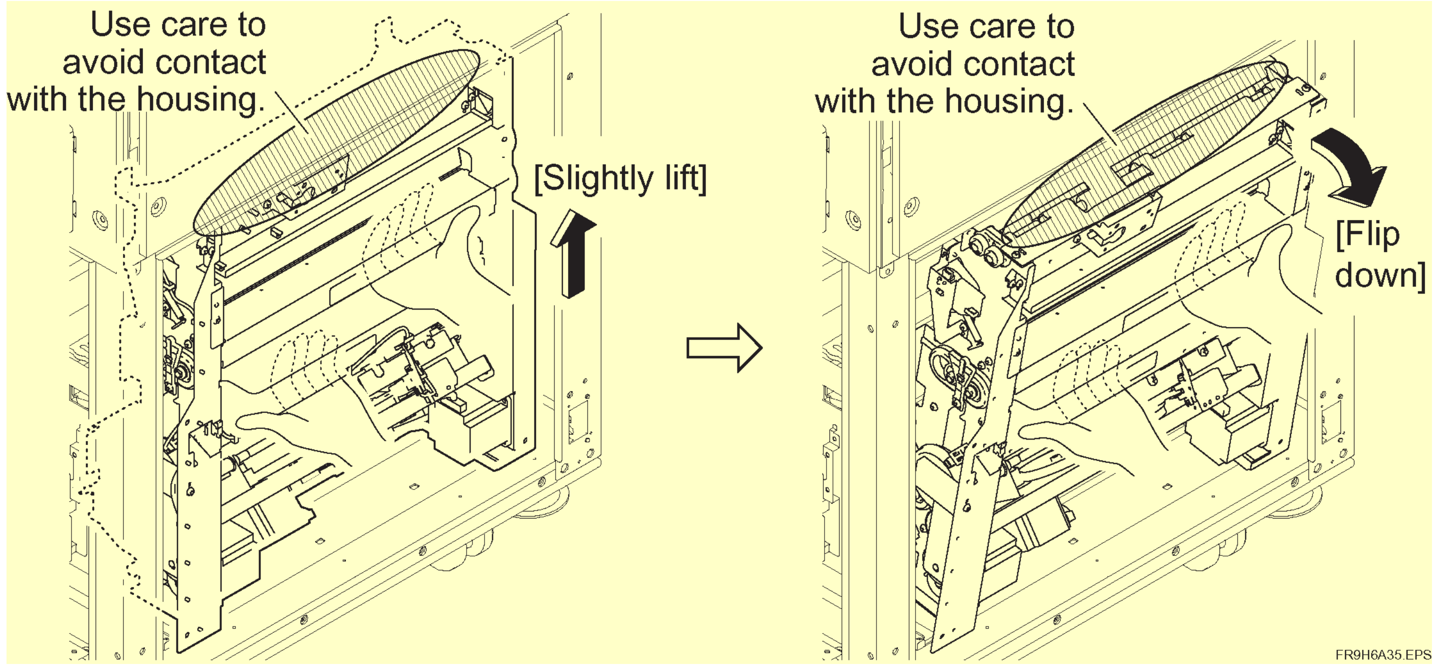
10. **Carry out the operations in the steps 11 and 12 from the direction indicated by the arrow in the figure below.**


FR9H6A34.EPS

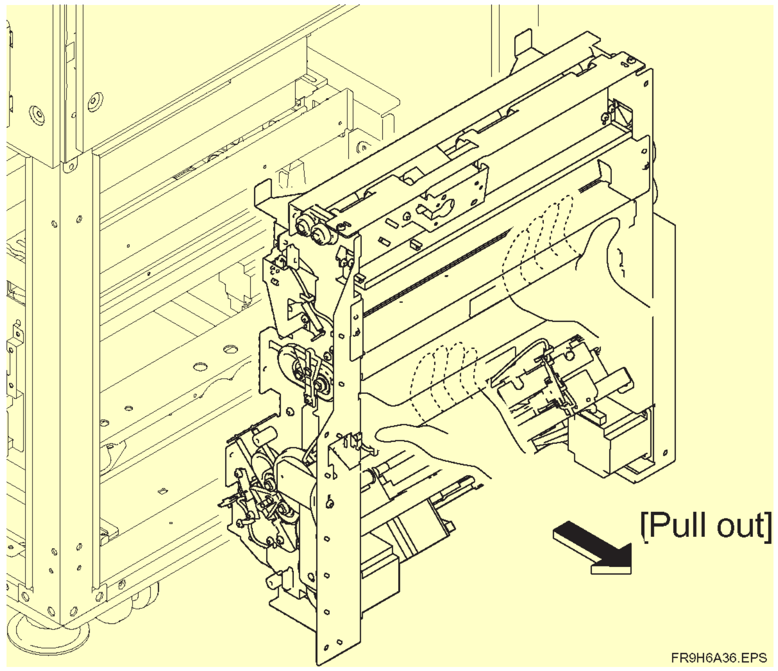
11. **Slightly lift the side-positioning conveyor unit and flip it down forward.**

◆ ***NOTE*** ◆

Exercise care not to bring the upper portion of the side-positioning conveyor unit into contact with the ceiling of the housing (shadowed portion in the figure) when slightly lifting the side-positioning conveyor unit and flipping it down forward. The guide of the side-positioning conveyor unit might possibly deform or get damaged.


Use care to avoid contact with the housing.
[Slightly lift]
Use care to avoid contact with the housing.
[Flip down]
FR9H6A35.EPS

12. **Pull out and remove the side-positioning conveyor unit.**

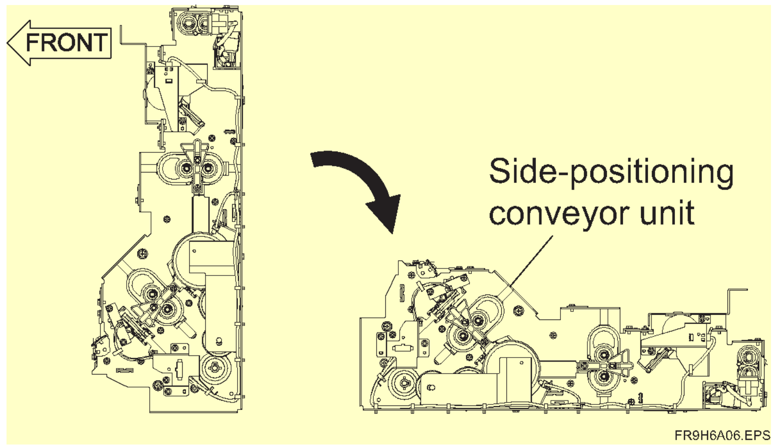

[Pull out]
FR9H6A36.EPS

2Y ☞ {PM:9.2} **3Y** ☞ {PM:9.3.3}

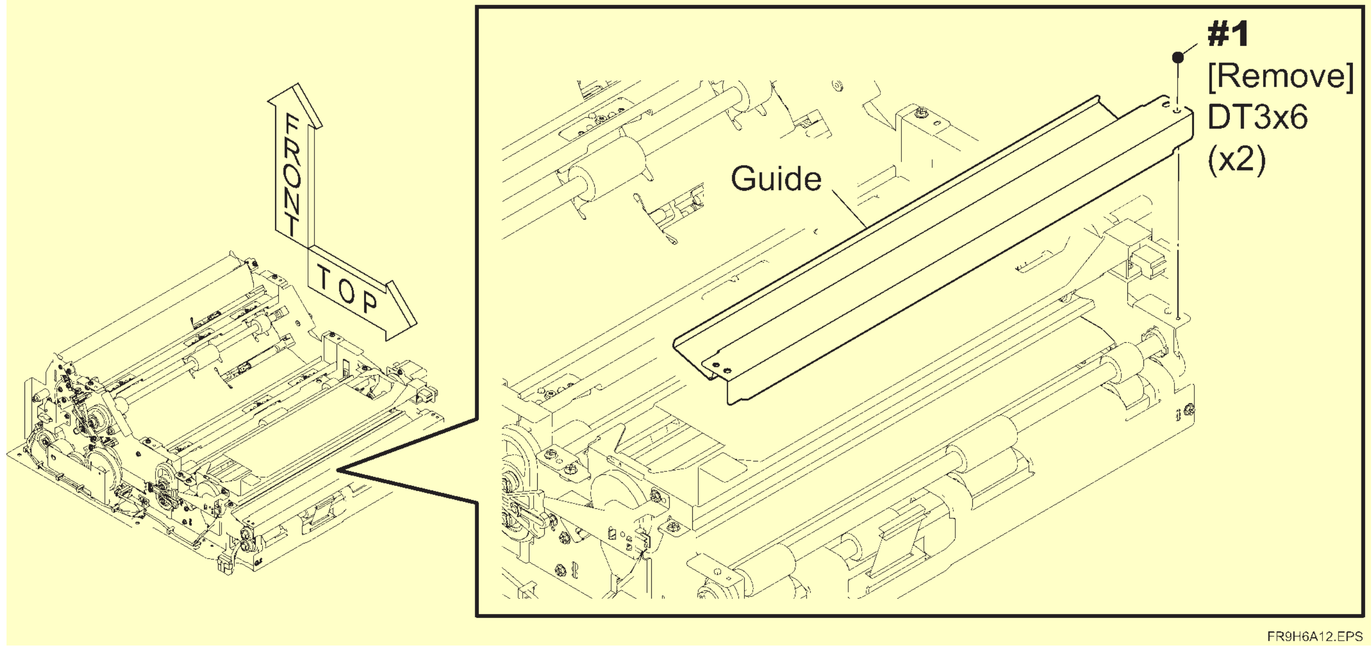
9.2 Cleaning the Guide

2Y ☞ {PM:9.3.2}

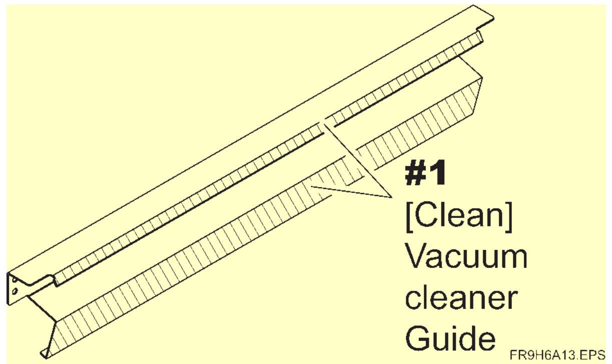
1. **Lay down the side-positioning conveyor unit in such an orientation as illustrated below.**


FRONT
Side-positioning conveyor unit
FR9H6A06.EPS

2. **Remove the guide.**


FRONT
TOP
Guide
#1
[Remove]
DT3x6
(x2)
FR9H6A12.EPS

3. **Clean the guide by use of a vacuum cleaner.**

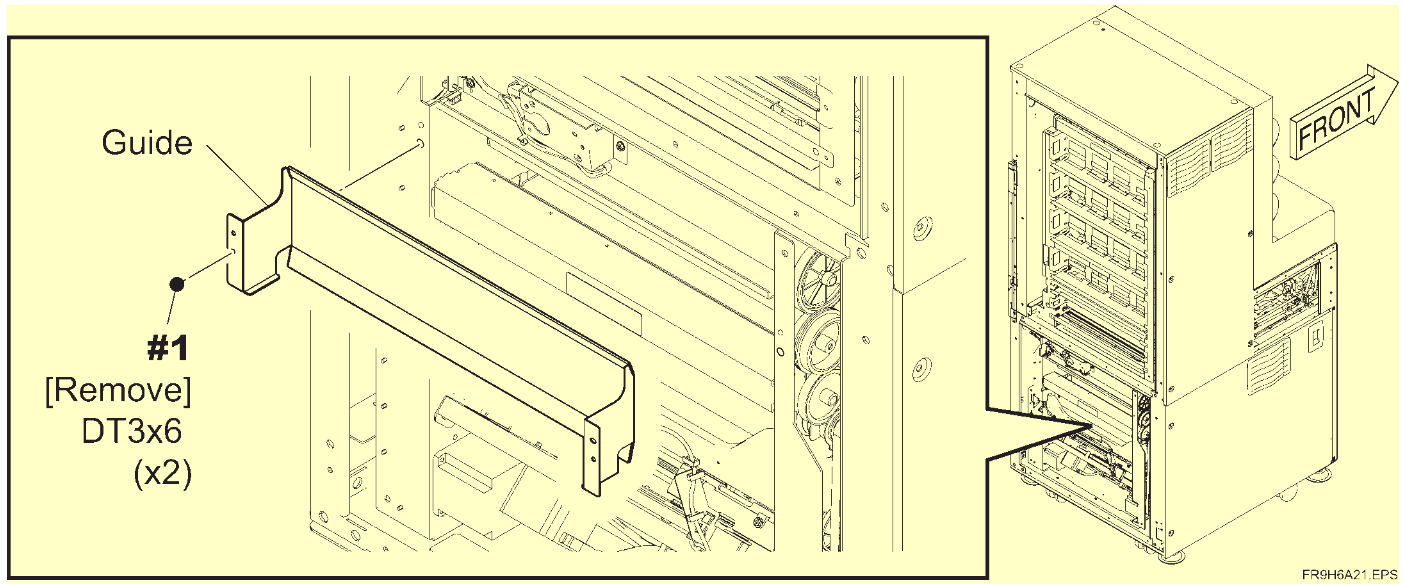

#1
[Clean]
Vacuum cleaner
Guide
FR9H6A13.EPS

9.3 Cleaning Guide Assembly

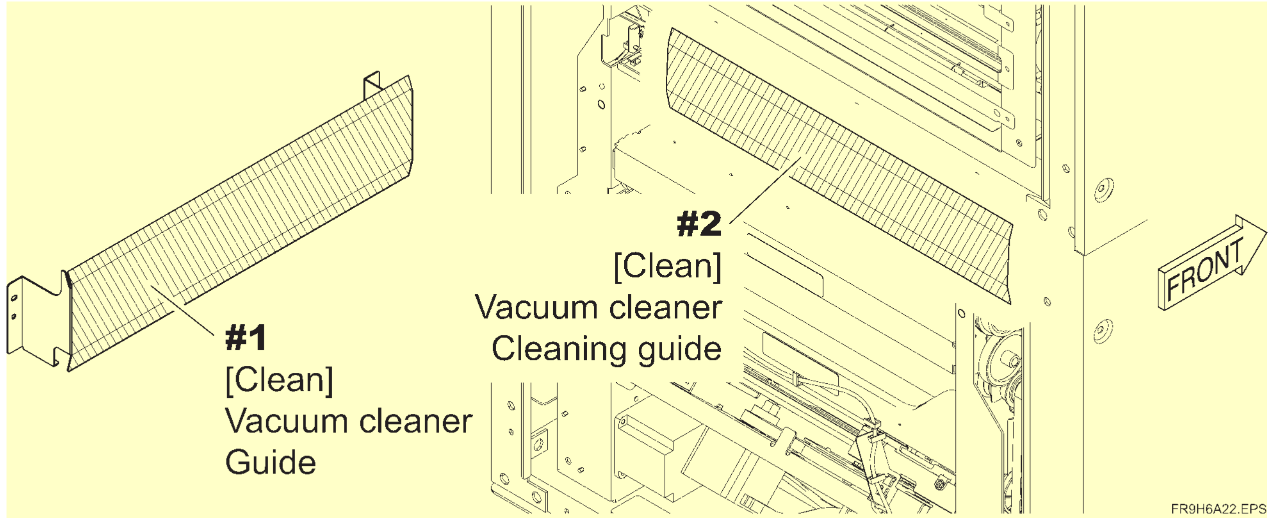
9.3.1 Cleaning the Cleaning Guide Assembly

1Y ☞ {PM:13.1}

1. **Remove the guide.**


Guide
#1
[Remove]
DT3x6
(x2)
FRONT
FR9H6A21.EPS

2. **Clean the guide and cleaning guide by use of a vacuum cleaner.**


#2
[Clean]
Vacuum cleaner
Cleaning guide
#1
[Clean]
Vacuum cleaner
Guide
FRONT
FR9H6A22.EPS

3. **Reinstall the guide in reverse order of removal.**

9.3.2 Cleaning the Cleaning Guide Assembly

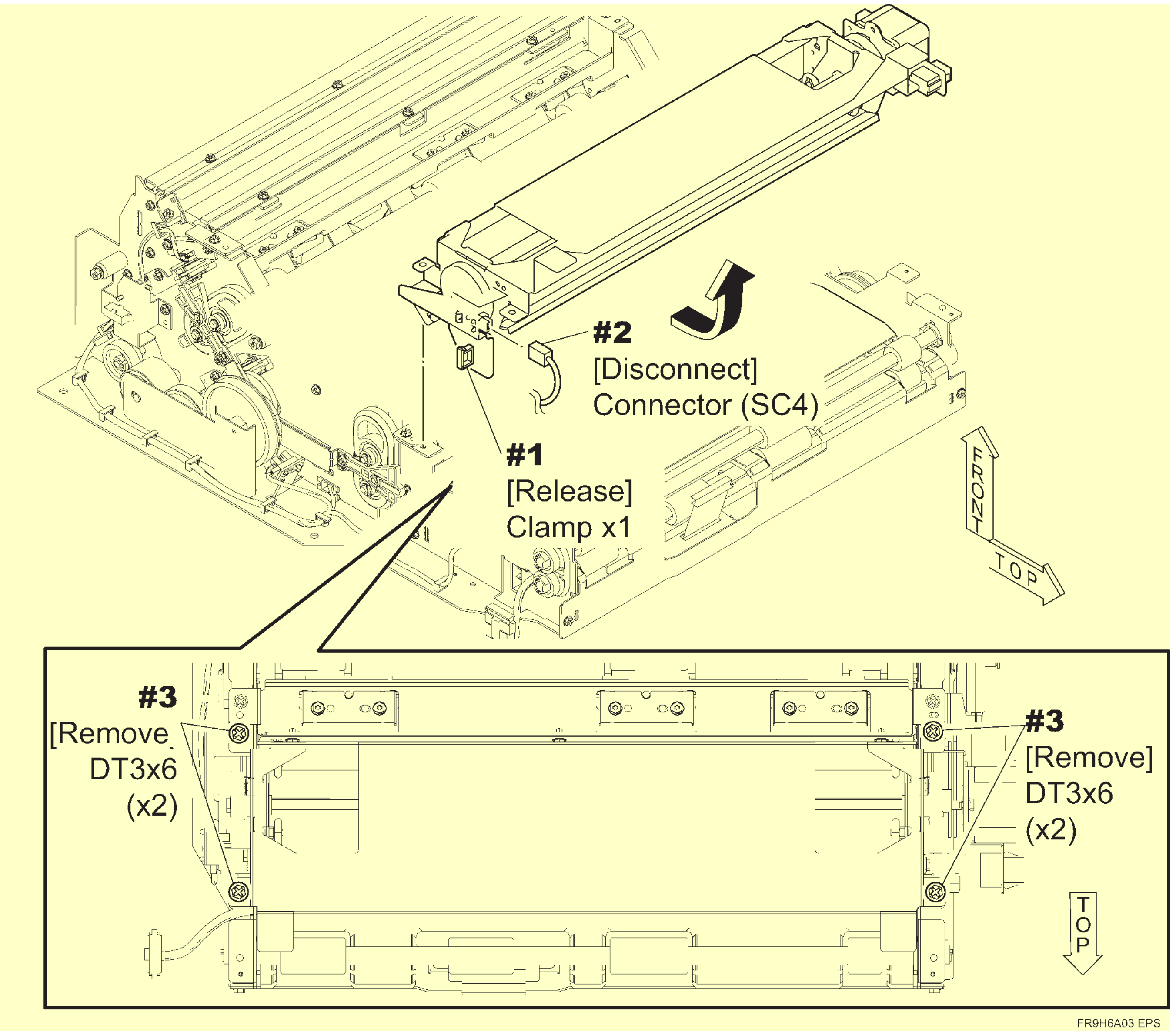
2Y

◆ ***INSTRUCTION*** ◆

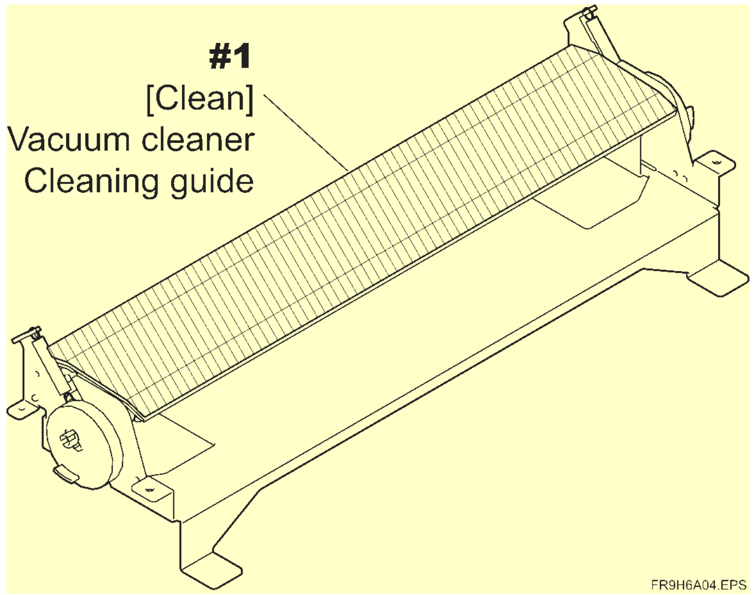
If the processed IP count is about 18,000, do not perform the procedures described below; instead, proceed to "9.3.3 Replacing the Cleaning Guide."

☞ *{PM:9.3.3_Replacing the Cleaning Guide}*

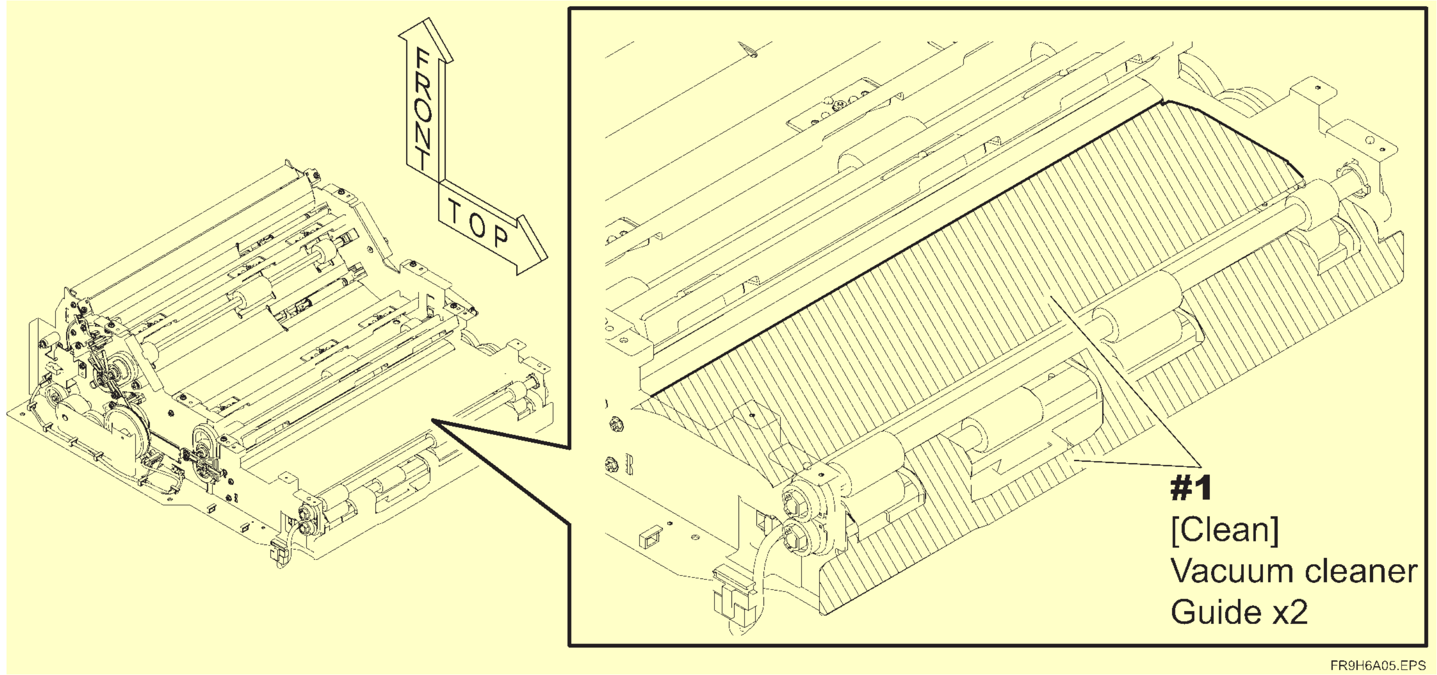
1. **Remove the cleaning guide assembly.**


#2
[Disconnect]
Connector (SC4)
#1
[Release]
Clamp x1
FRONT
TOP
#3
[Remove]
DT3x6
(x2)
#3
[Remove]
DT3x6
(x2)
TOP
FR9H6A03.EPS

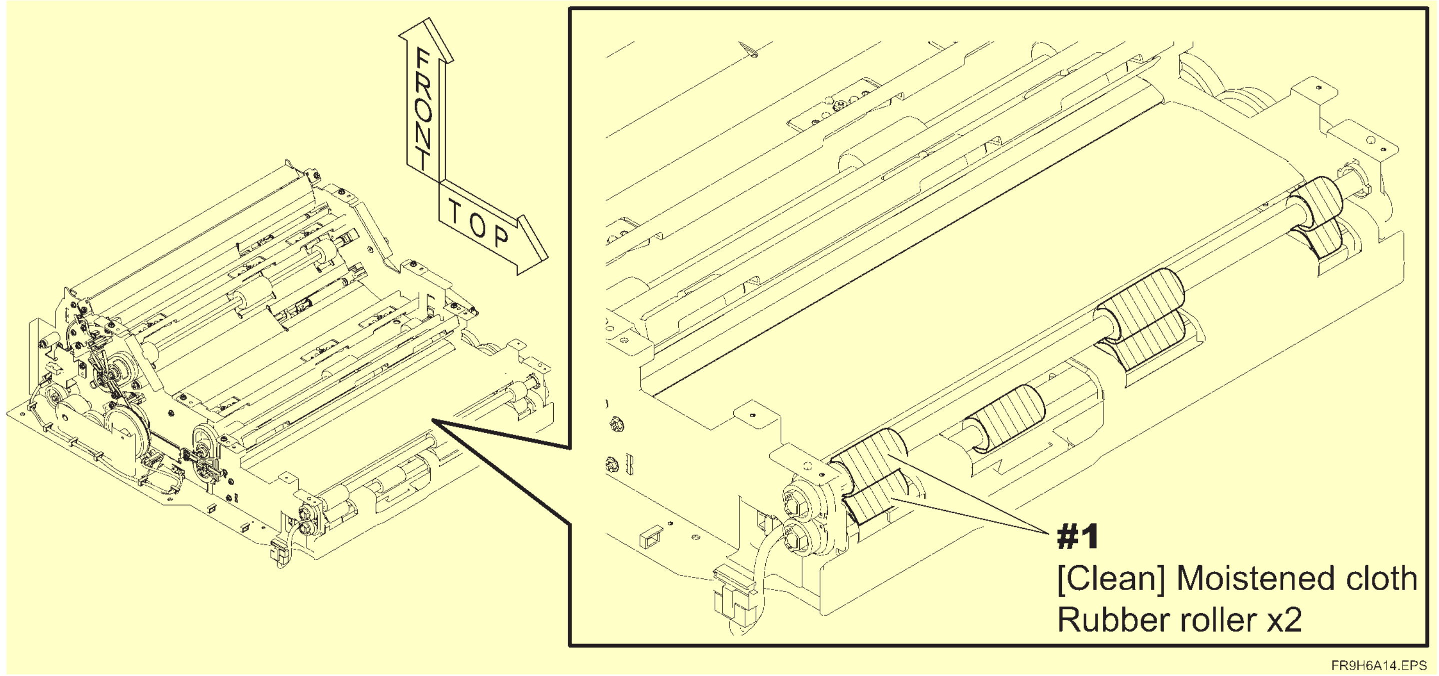
2. **Clean the cleaning guide by use of a vacuum cleaner.**


#1
[Clean]
Vacuum cleaner
Cleaning guide
FR9H6A04.EPS

3. **Clean the guides by use of a vacuum cleaner.**


FRONT
TOP
#1
[Clean]
Vacuum cleaner
Guide x2
FR9H6A05.EPS

4. **Wipe the rubber rollers with a moistened cloth.**

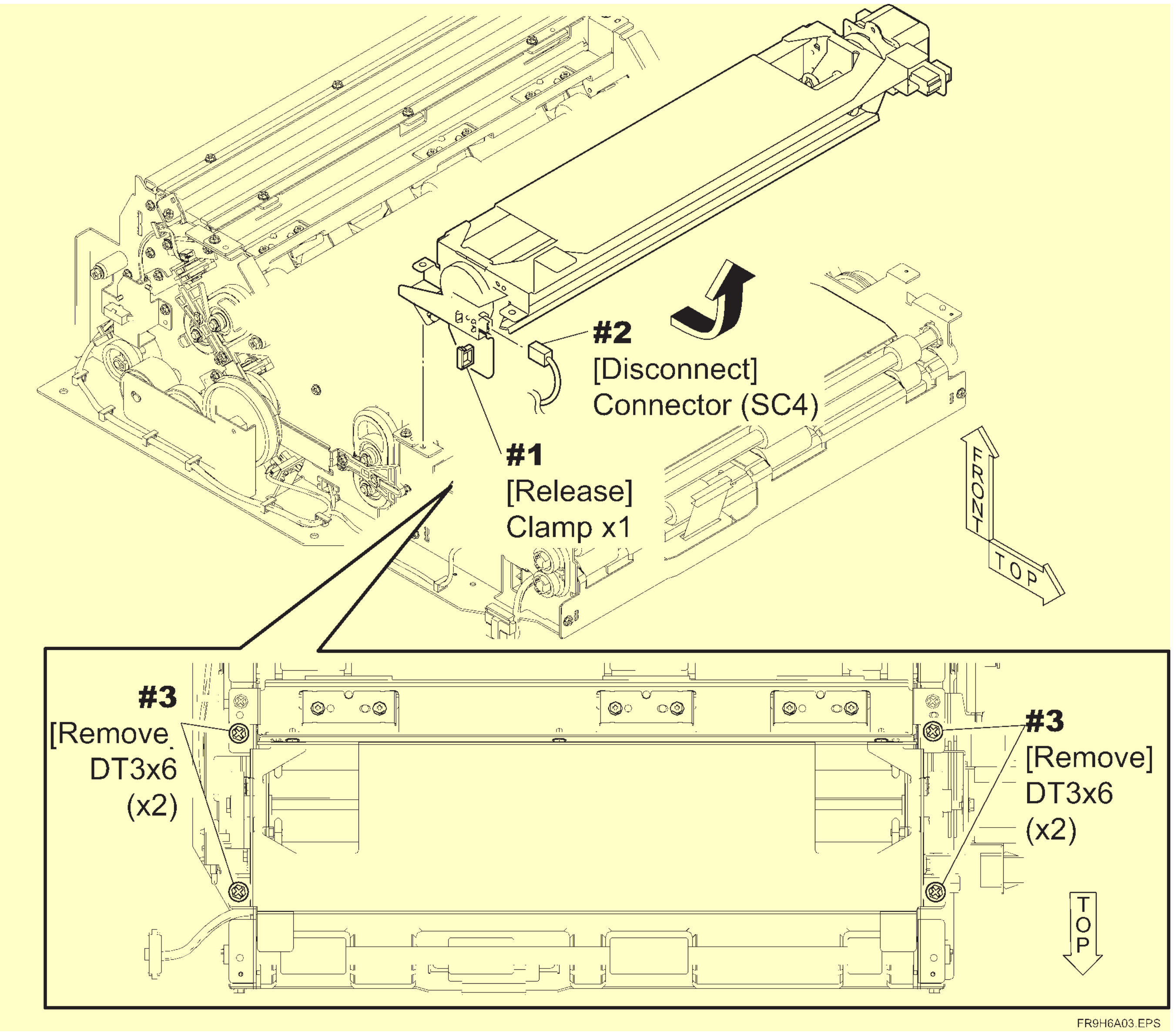

FRONT
TOP
#1
[Clean] Moistened cloth
Rubber roller x2
FR9H6A14.EPS

2Y ☞ {PM:9.4}

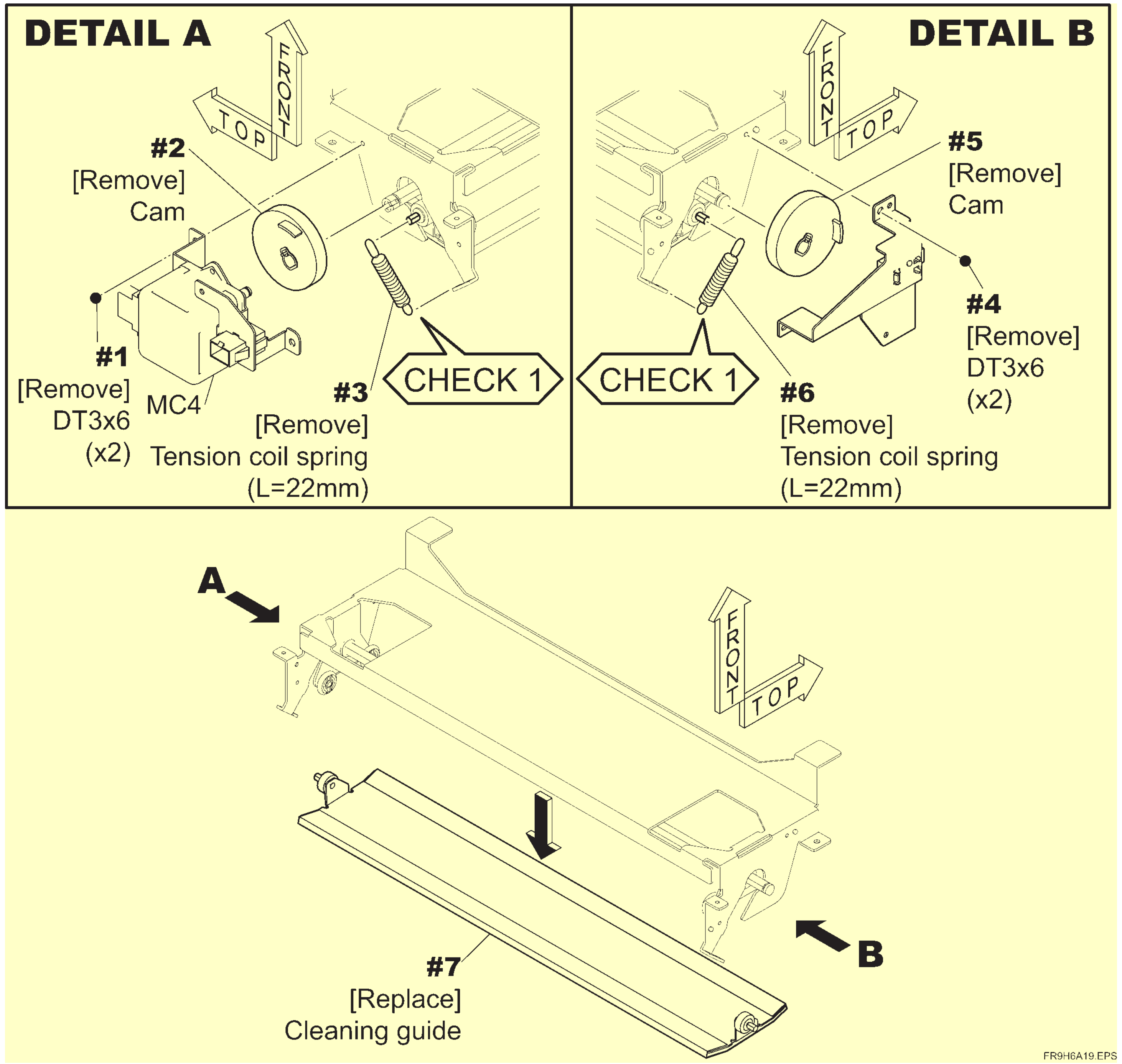
9.3.3 Replacing the Cleaning Guide

3Y

1. Remove the cleaning guide assembly.

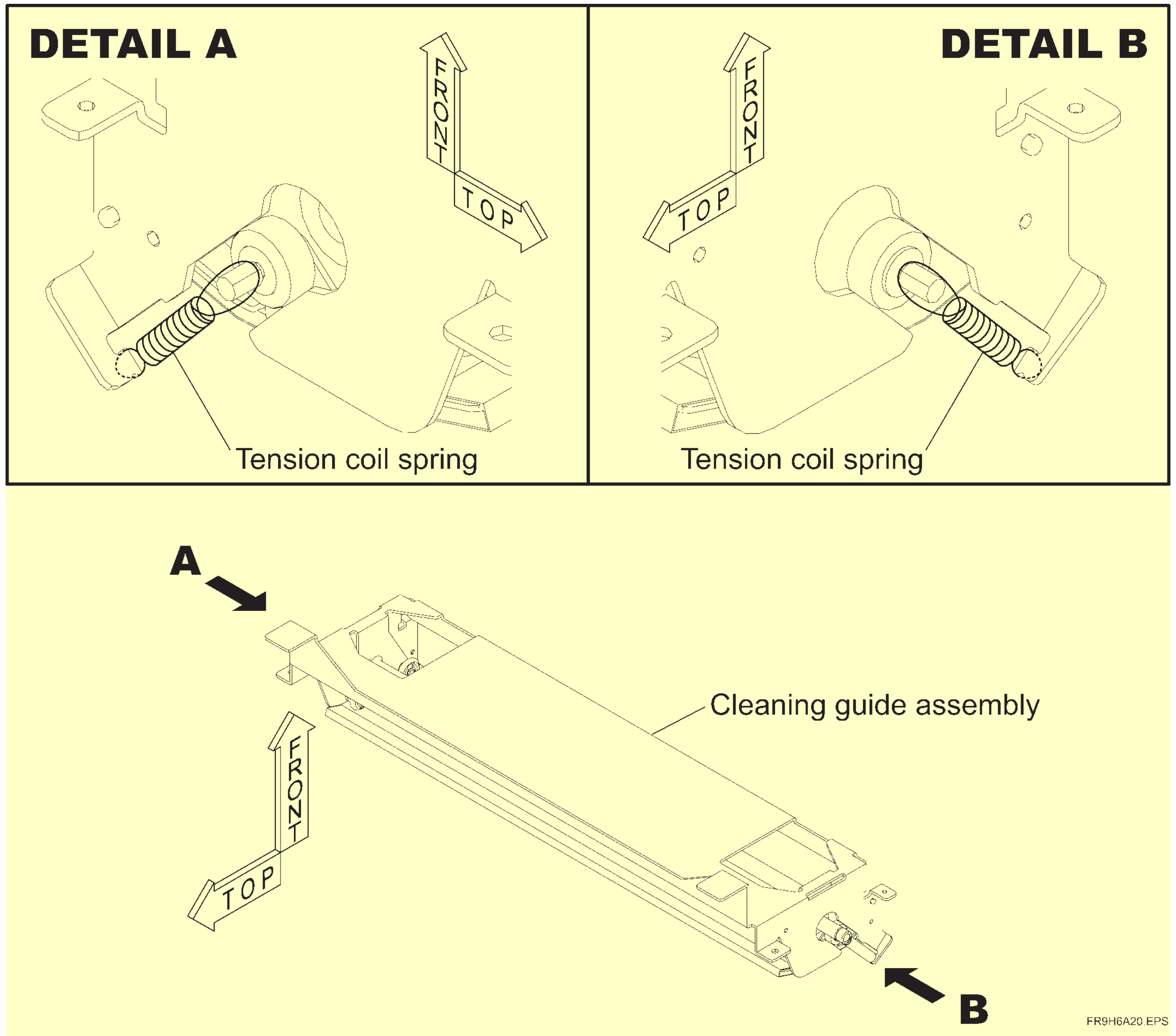

#2
[Disconnect]
Connector (SC4)
#1
[Release]
Clamp x1
FRONT
TOP
#3
[Remove
DT3x6
(x2)
#3
[Remove]
DT3x6
(x2)
TOP
FR9H6A03.EPS

4. Replace the cleaning guide.


DETAIL A
FRONT
TOP
#2
[Remove]
Cam
#1
[Remove]
DT3x6
(x2)
MC4
#3
[Remove]
Tension coil spring
(L=22mm)
CHECK 1
DETAIL B
FRONT
TOP
#5
[Remove]
Cam
#4
[Remove]
DT3x6
(x2)
CHECK 1
#6
[Remove]
Tension coil spring
(L=22mm)
A
FRONT
TOP
B
#7
[Replace]
Cleaning guide
FR9H6A19.EPS

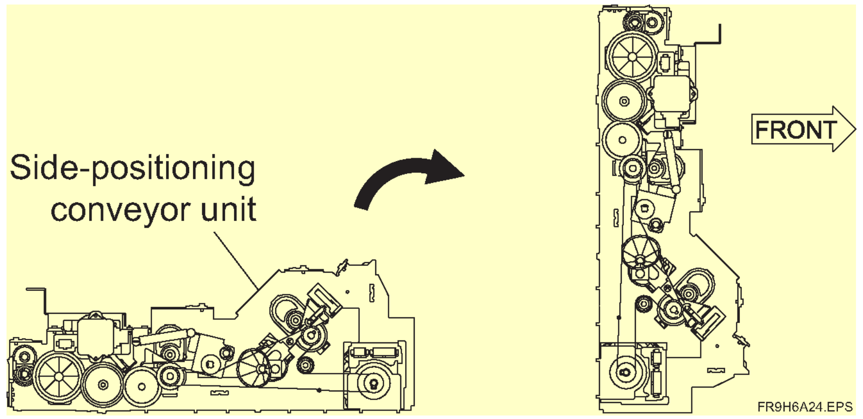
- **CHECK 1**

  Make sure that the tension coil springs are attached properly.

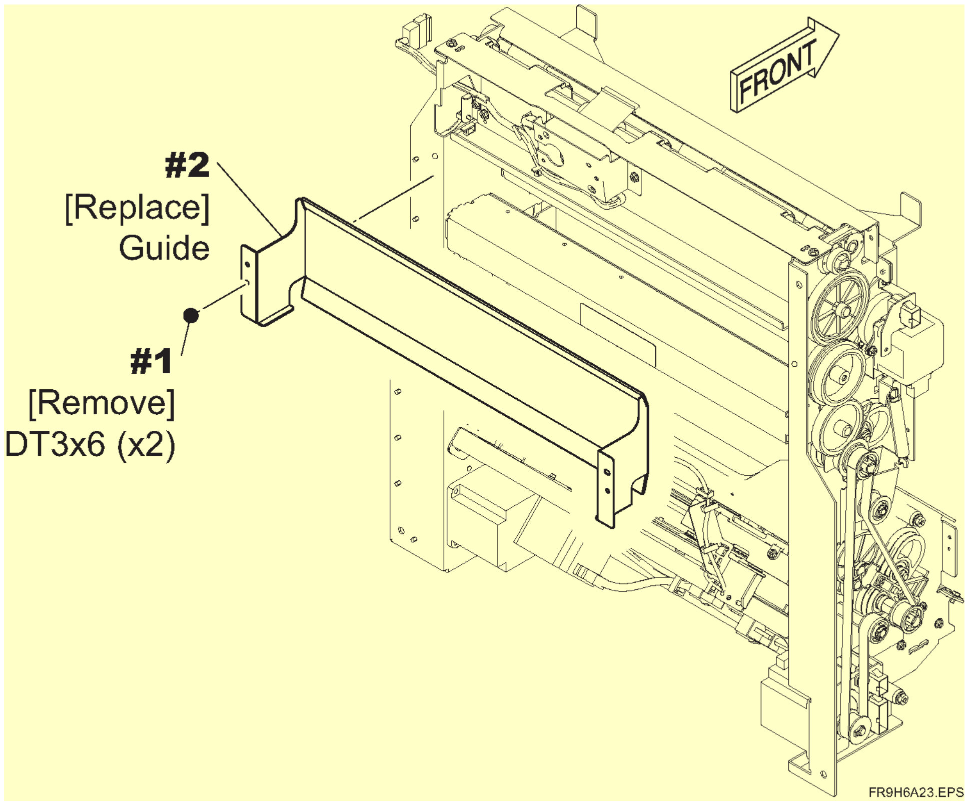

DETAIL A
FRONT
TOP
Tension coil spring
DETAIL B
FRONT
TOP
Tension coil spring
A
Cleaning guide assembly
FRONT
TOP
B
FR9H6A20.EPS

5. **Reinstall the cleaning guide in reverse order of removal.**

6. **Lay down the side-positioning conveyor unit in such an orientation as illustrated below.**


Side-positioning conveyor unit
FRONT
FR9H6A24.EPS

7. **Replace the guide.**


FRONT
#2
[Replace]
Guide
#1
[Remove]
DT3x6 (x2)
FR9H6A23.EPS

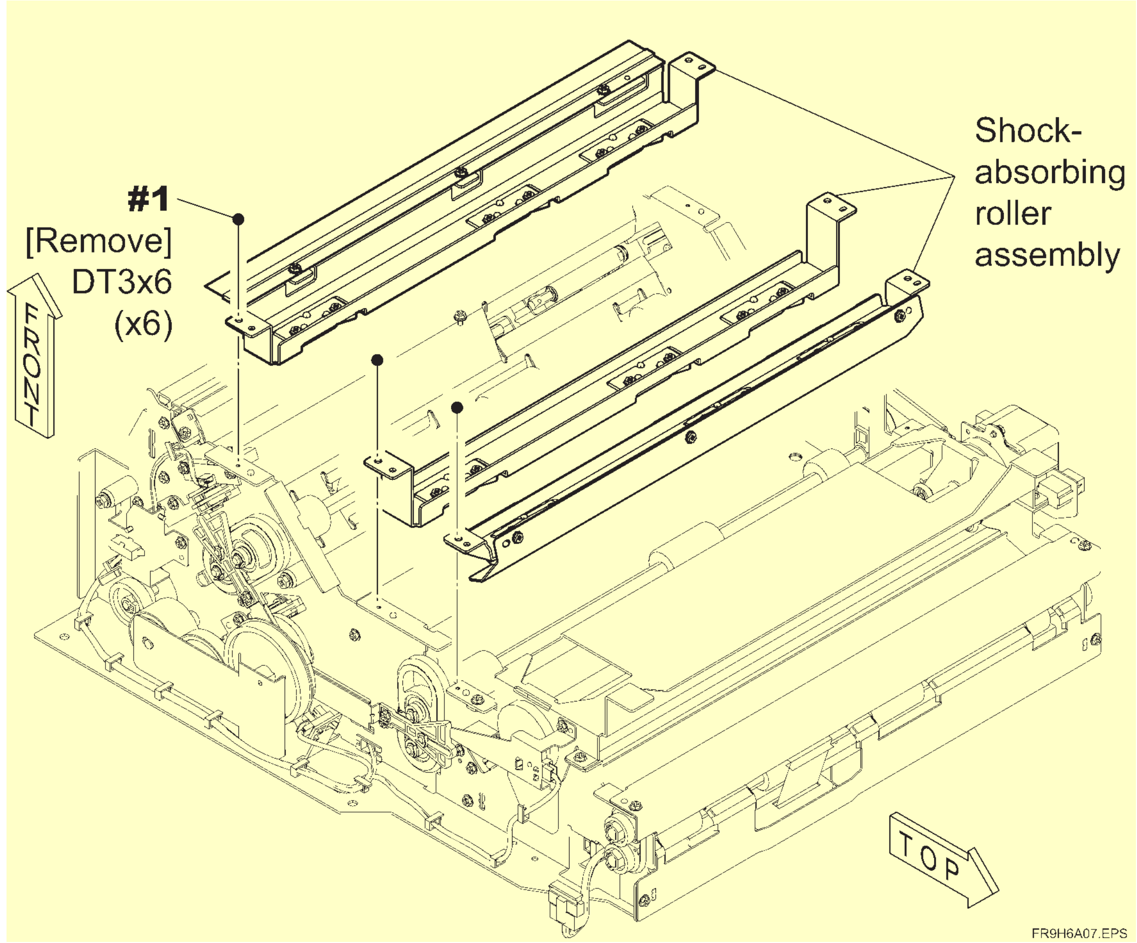
8. **Reinstall the guide in reverse order of step 7.**

3Y ☞ {PM:9.5}

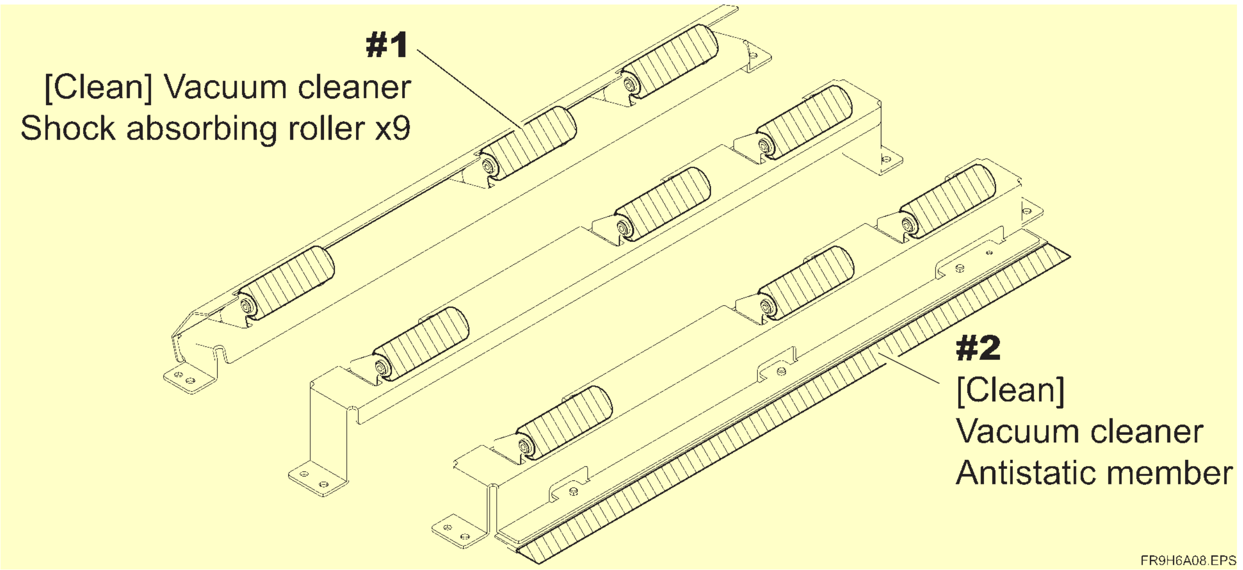
9.4 Cleaning the Shock-Absorbing Roller, Guide, and Rubber Roller

2Y ☞ {PM:9.5}

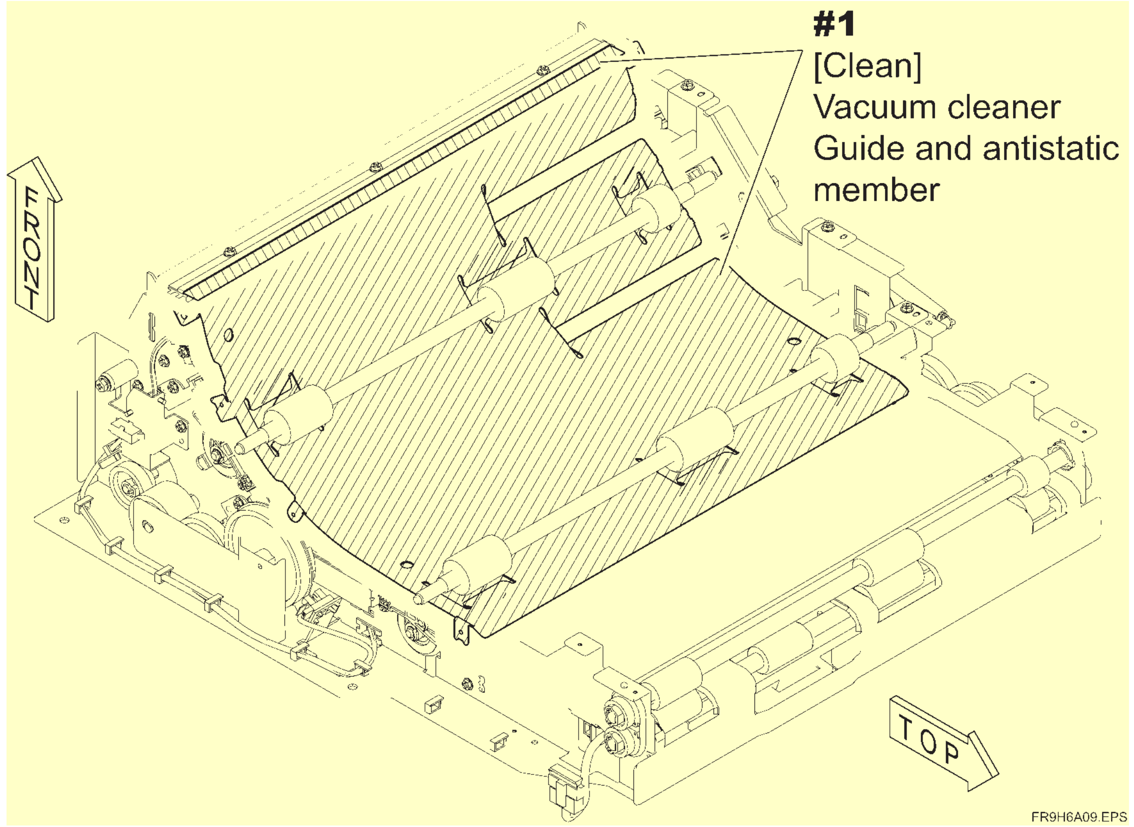
1. **Remove the shock-absorbing roller assemblies.**


#1
[Remove]
DT3x6
(x6)
FRONT
Shock-absorbing roller assembly
TOP
FR9H6A07.EPS

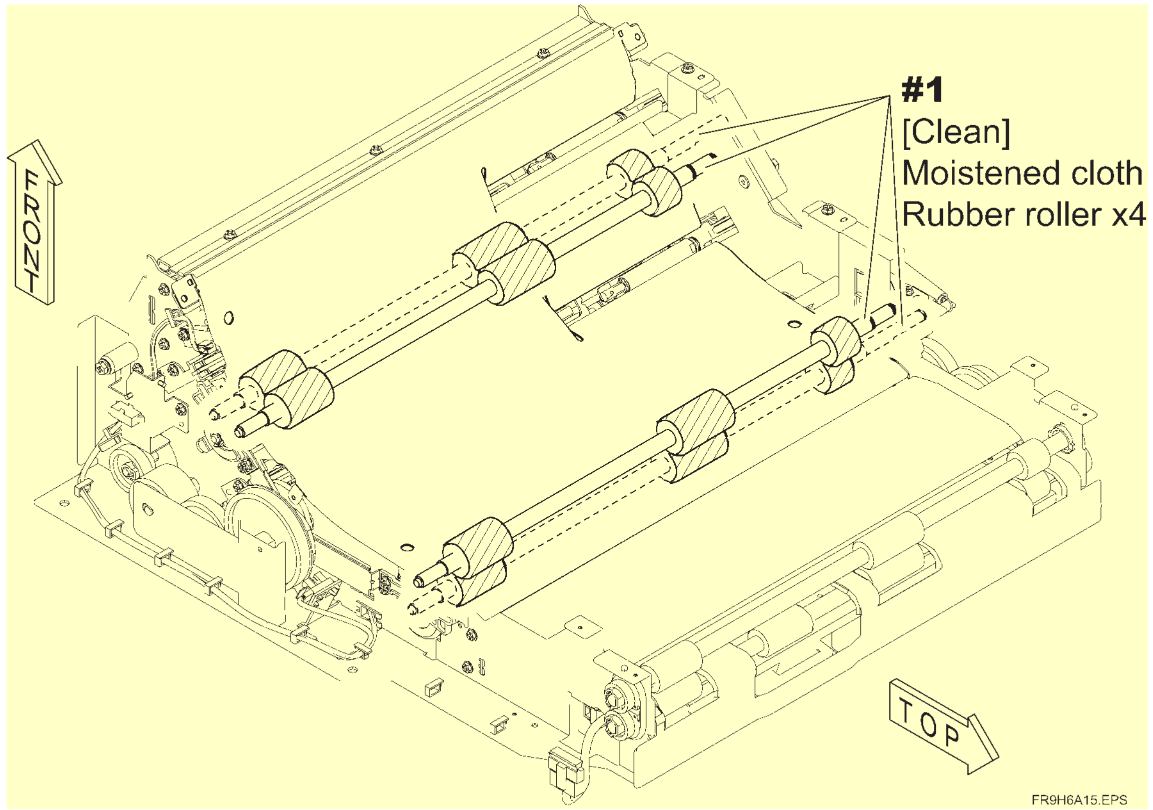
2. **Clean the shock absorbing rollers and antistatic member by use of a vacuum cleaner.**


#1
[Clean] Vacuum cleaner
Shock absorbing roller x9
#2
[Clean]
Vacuum cleaner
Antistatic member
FR9H6A08.EPS

3. **Clean the guide and antistatic member by use of a vacuum cleaner.**


#1
[Clean]
Vacuum cleaner
Guide and antistatic member
FRONT
TOP
FR9H6A09.EPS

4. **Wipe the rubber rollers with a moistened cloth.**

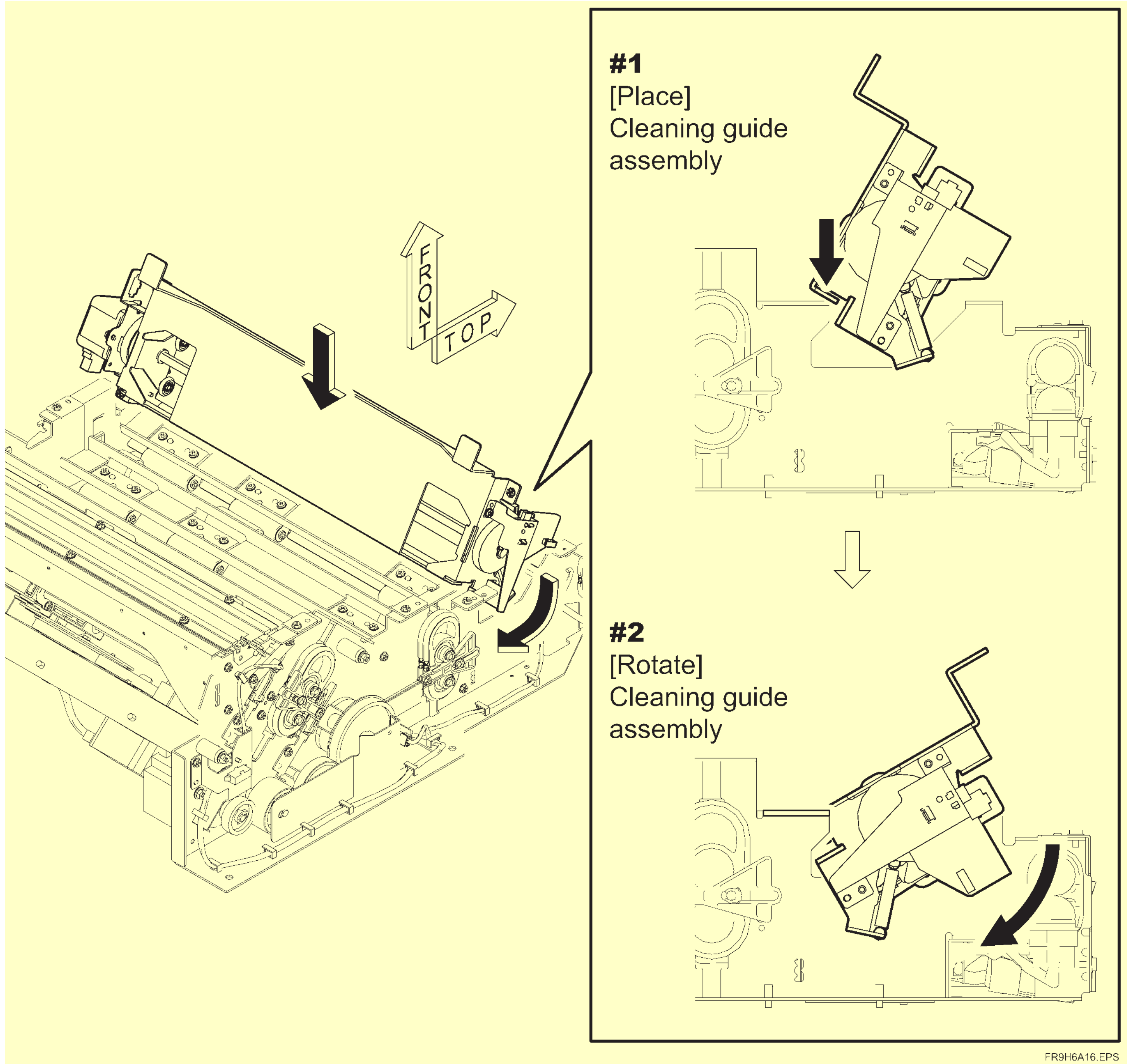

#1
[Clean]
Moistened cloth
Rubber roller x4
FRONT
TOP
FR9H6A15.EPS

5. **Reinstall the shock-absorbing roller assemblies in reverse order of removal.**

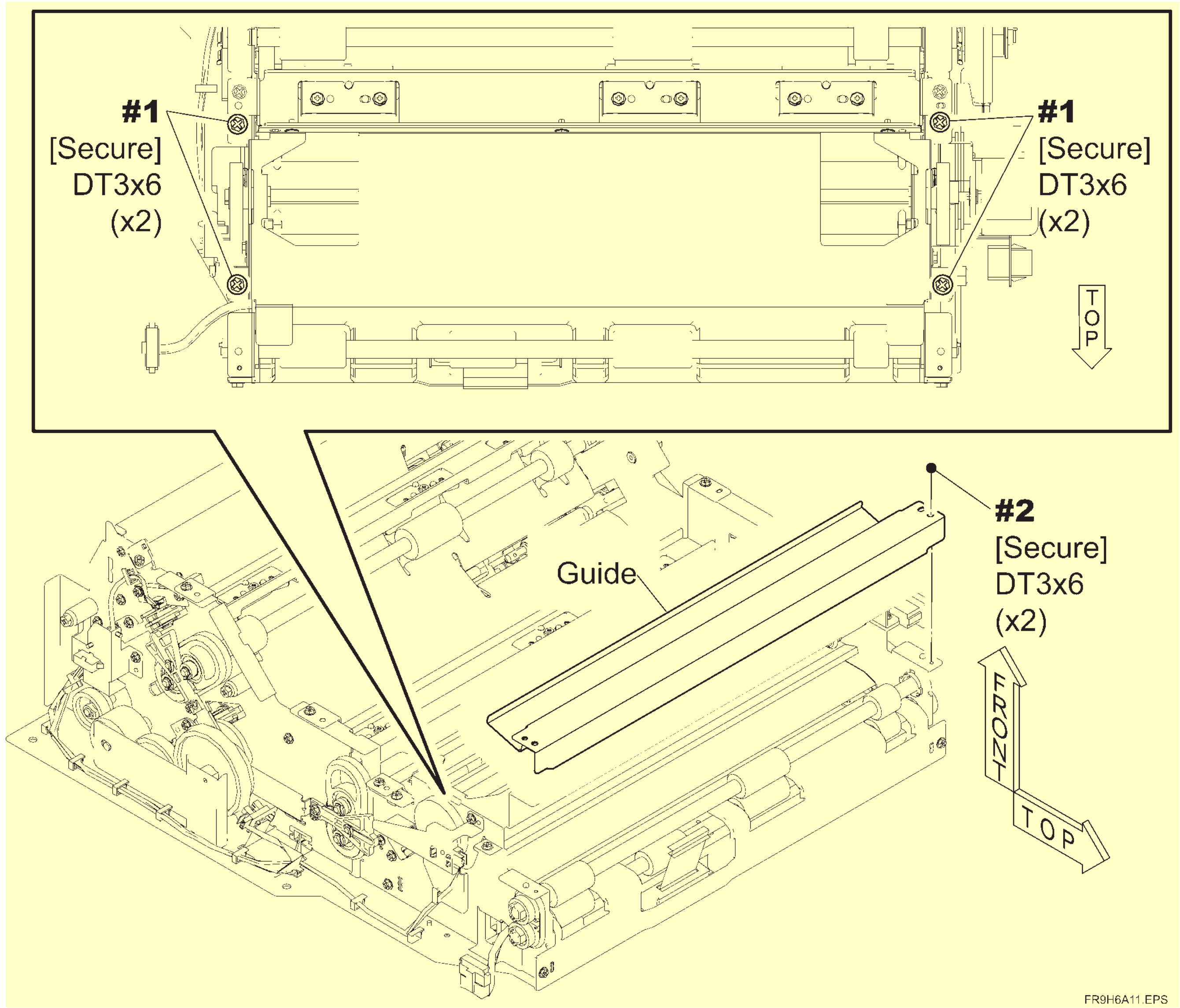
9.5 Reinstalling the Cleaning Guide Assembly and Guide

2Y ☞ {PM:10.1} **3Y** ☞ {PM:11.10}

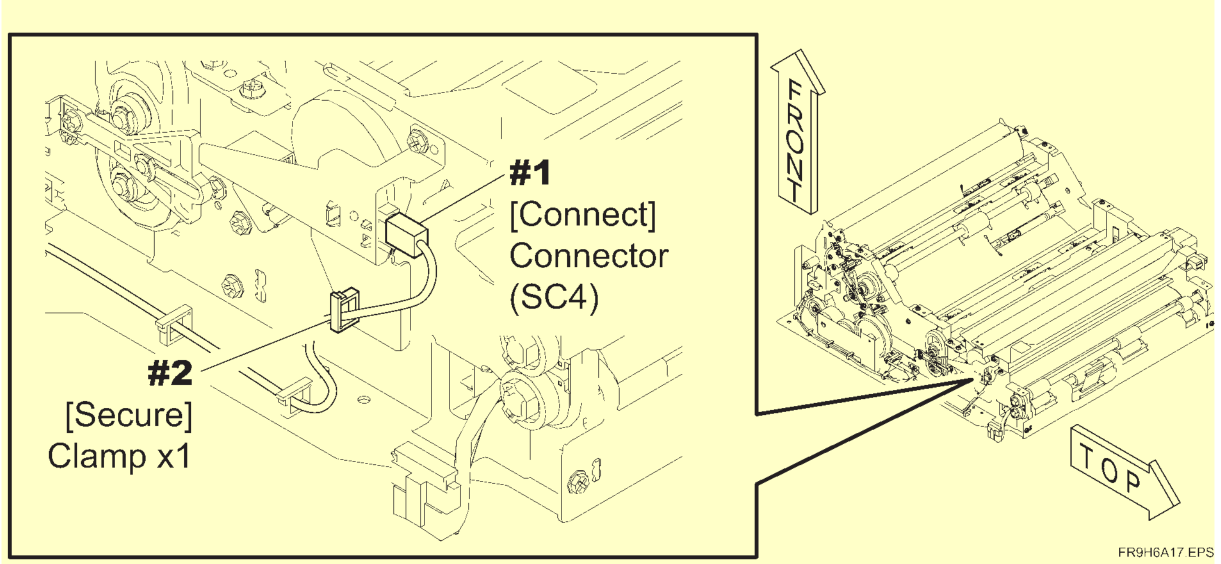
1. Mount the cleaning guide assembly onto the side-positioning conveyor unit.


#1
[Place]
Cleaning guide assembly
#2
[Rotate]
Cleaning guide assembly
FRONT
TOP
FR9H6A16.EPS

2. Secure the cleaning guide assembly and guide in place.


#1
[Secure]
DT3x6
(x2)
#1
[Secure]
DT3x6
(x2)
TOP
Guide
#2
[Secure]
DT3x6
(x2)
FRONT
TOP
FR9H6A11.EPS

3. Connect the connector.

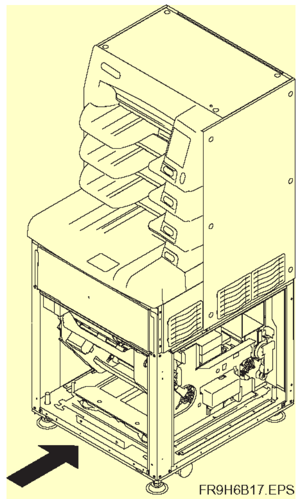

#1
[Connect]
Connector
(SC4)
#2
[Secure]
Clamp x1
FRONT
TOP
FR9H6A17.EPS

10. Post-Reading Conveyor Unit

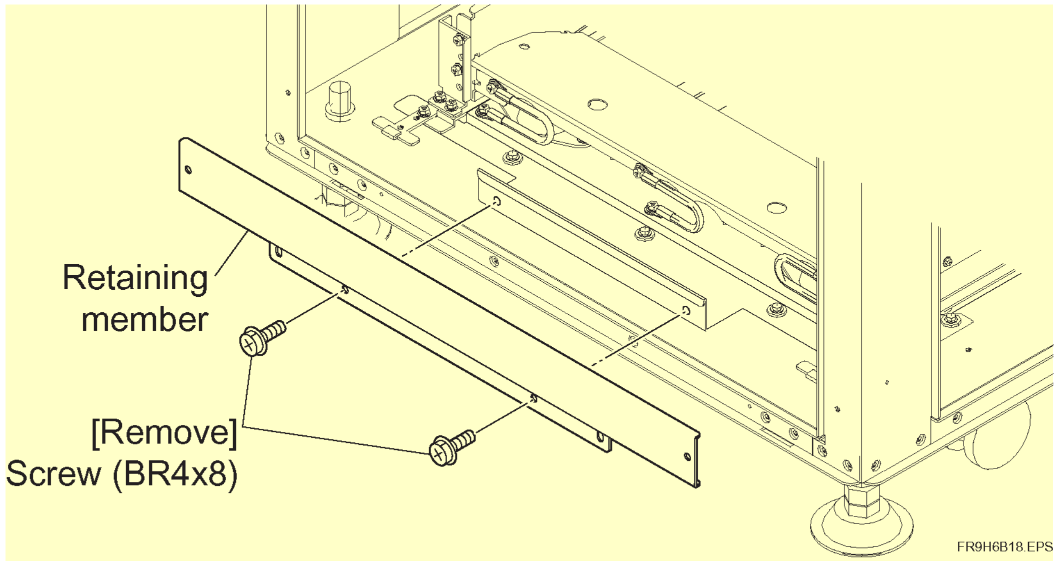
10.1 Removing the Retaining Member

2Y ☞ {PM:10.2}

1. **Carry out the operations in the step 2 from the direction indicated by the arrow in the figure below.**


FR9H6B17.EPS

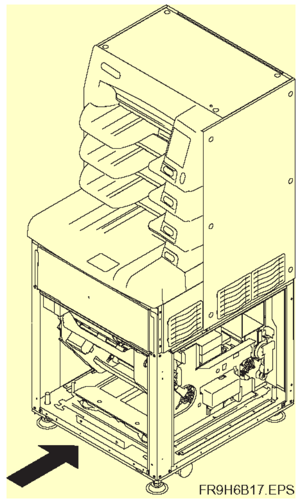
2. **Remove the retaining member.**


Retaining member
[Remove]
Screw (BR4x8)
FR9H6B18.EPS

10.2 Removing the Post-Reading Conveyor Unit

2Y

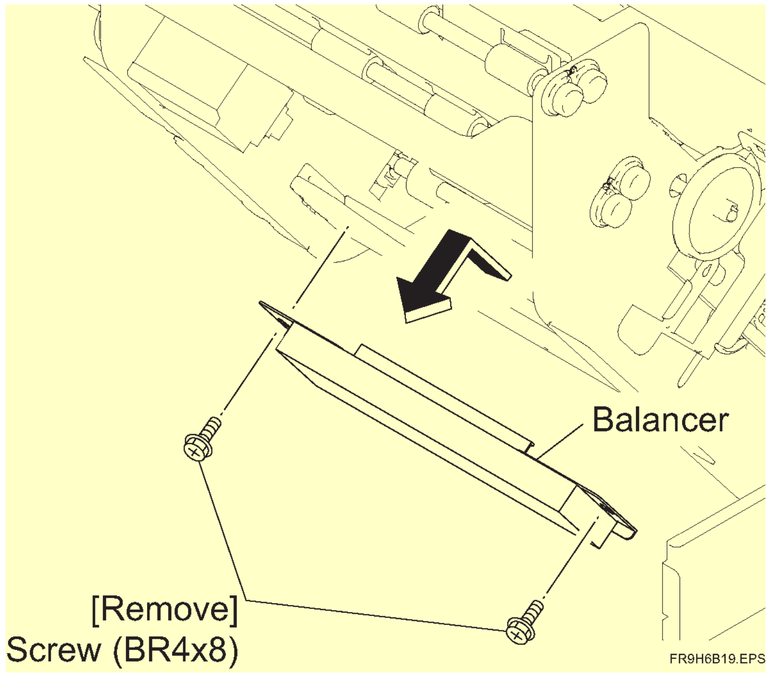
1. **Carry out the operations in the step 2 from the direction indicated by the arrow in the figure below.**


FR9H6B17.EPS

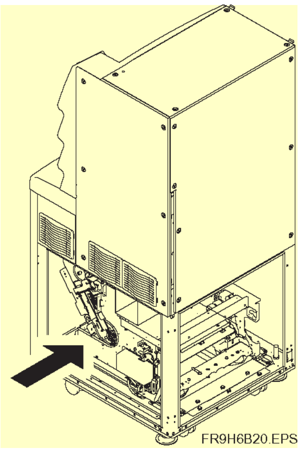
2. **Remove the balancer.**

◆ NOTE ◆

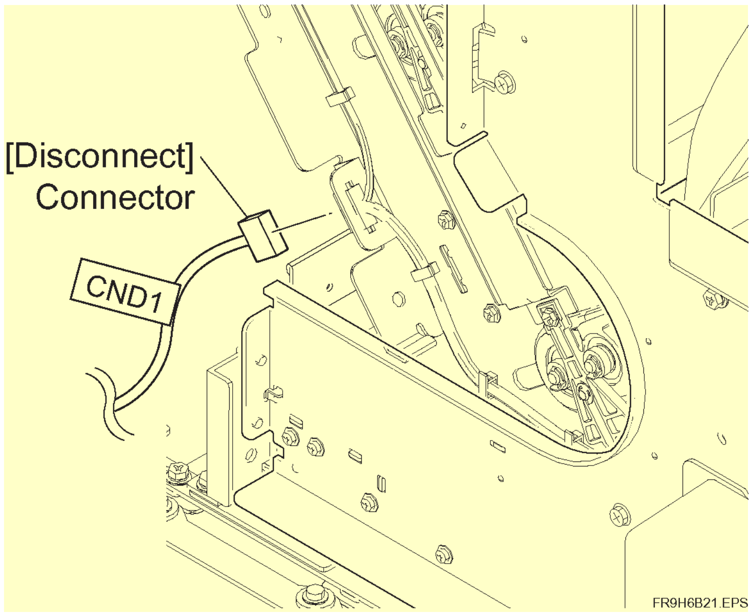
Grasp the balancer with both hands to remove it. Because the balancer weighs about 6 kg, your wrist may be hurt if you hold it with one hand.


Balancer
[Remove]
Screw (BR4x8)
FR9H6B19.EPS

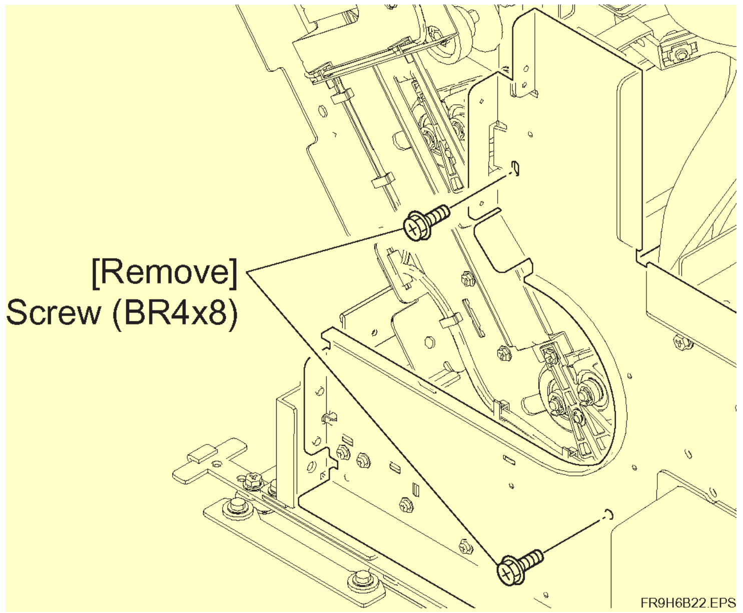
3. **Carry out the operations in the steps 4 and 5 from the direction indicated by the arrow in the figure below.**


FR9H6B20.EPS

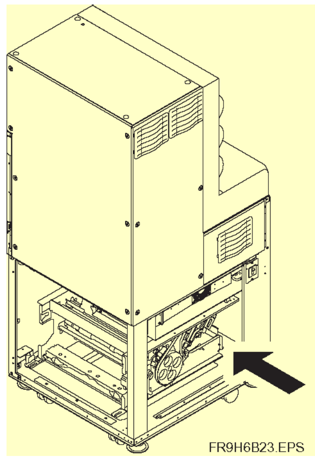
4. **Disconnect the connector.**


[Disconnect]
Connector
CND1
FR9H6B21.EPS

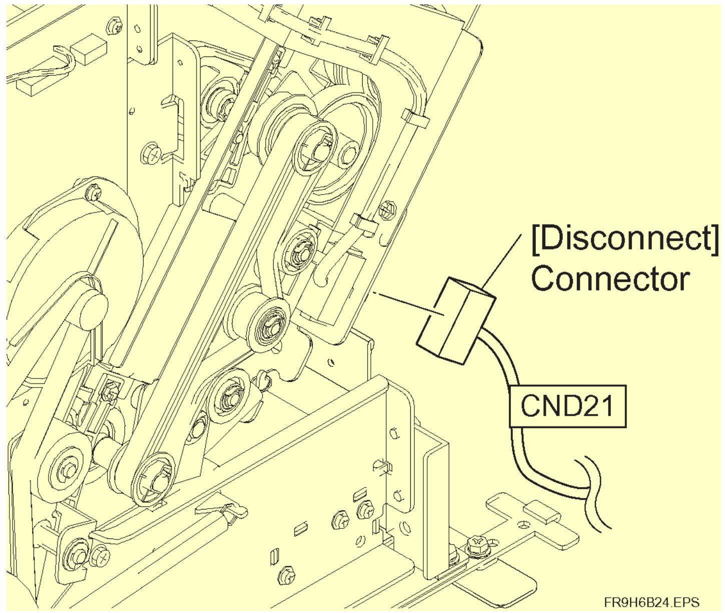
5. **Remove the screws.**


[Remove]
Screw (BR4x8)
FR9H6B22.EPS

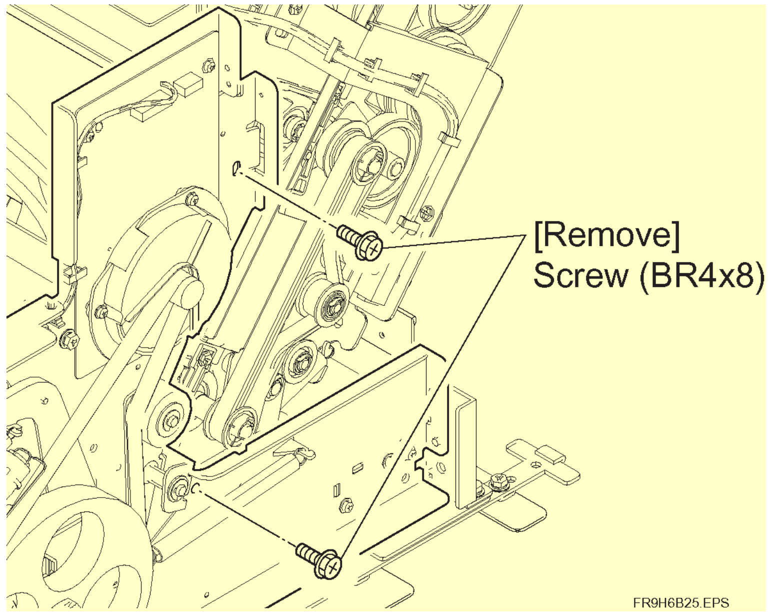
6. **Carry out the operations in the steps 7 and 8 from the direction indicated by the arrow in the figure below.**


FR9H6B23.EPS

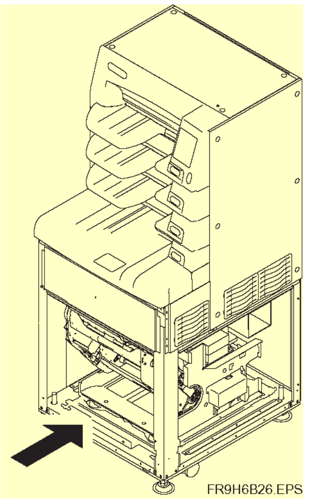
7. **Disconnect the connector.**


[Disconnect]
Connector
CND21
FR9H6B24.EPS

8. **Remove the screws.**


[Remove]
Screw (BR4x8)
FR9H6B25.EPS

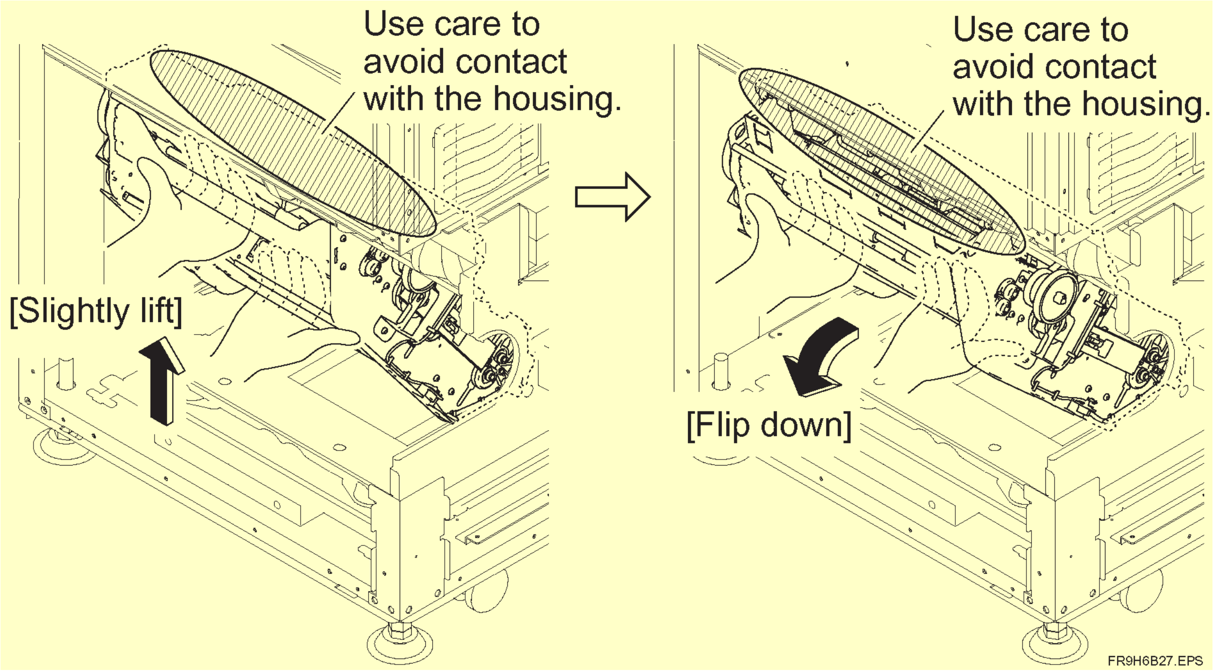
9. **Carry out the operations in the steps 10 and 11 from the direction indicated by the arrow in the figure below.**


FR9H6B26.EPS

10. **Slightly lift the post-reading conveyor unit and flip it down forward.**

◆ NOTE ◆

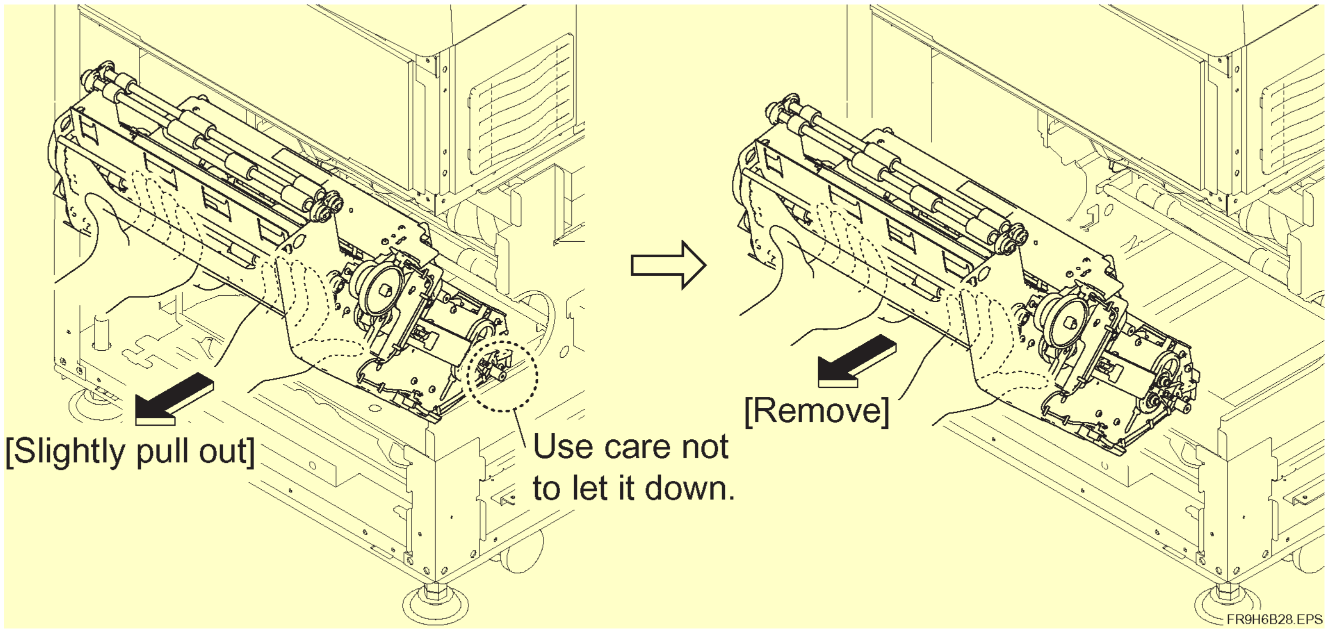
Exercise care not to bring the upper portion of the post-reading conveyor unit into contact with the ceiling of the housing (shadowed portion in the figure) when slightly lifting the post-reading conveyor unit and flipping it down forward. The guide of the post-reading conveyor unit might possibly deform or get damaged.


Use care to avoid contact with the housing.
[Slightly lift]
Use care to avoid contact with the housing.
[Flip down]
FR9H6B27.EPS

11. **Slightly pull out the post-reading conveyor unit for removal.**

◆ NOTE ◆

Pull out the post-reading conveyor unit carefully not to allow the retaining pin at the tip of the unit to come off from the rail in the subscanning unit. Otherwise, the sensor around the tip might get damaged.


[Slightly pull out]
Use care not to let it down.
[Remove]
FR9H6B28.EPS

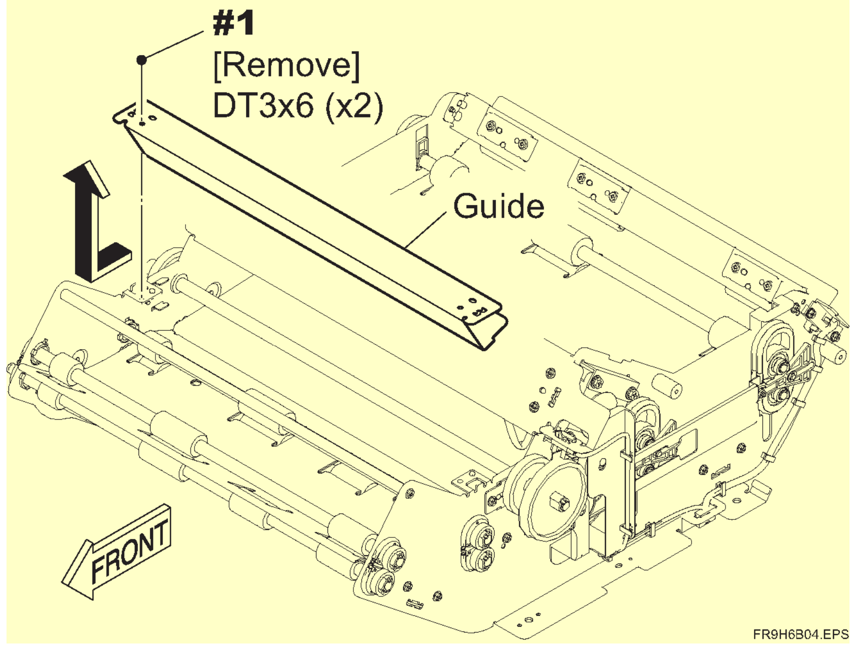
2Y ☞ {PM:10.4}

10.3 Nothing

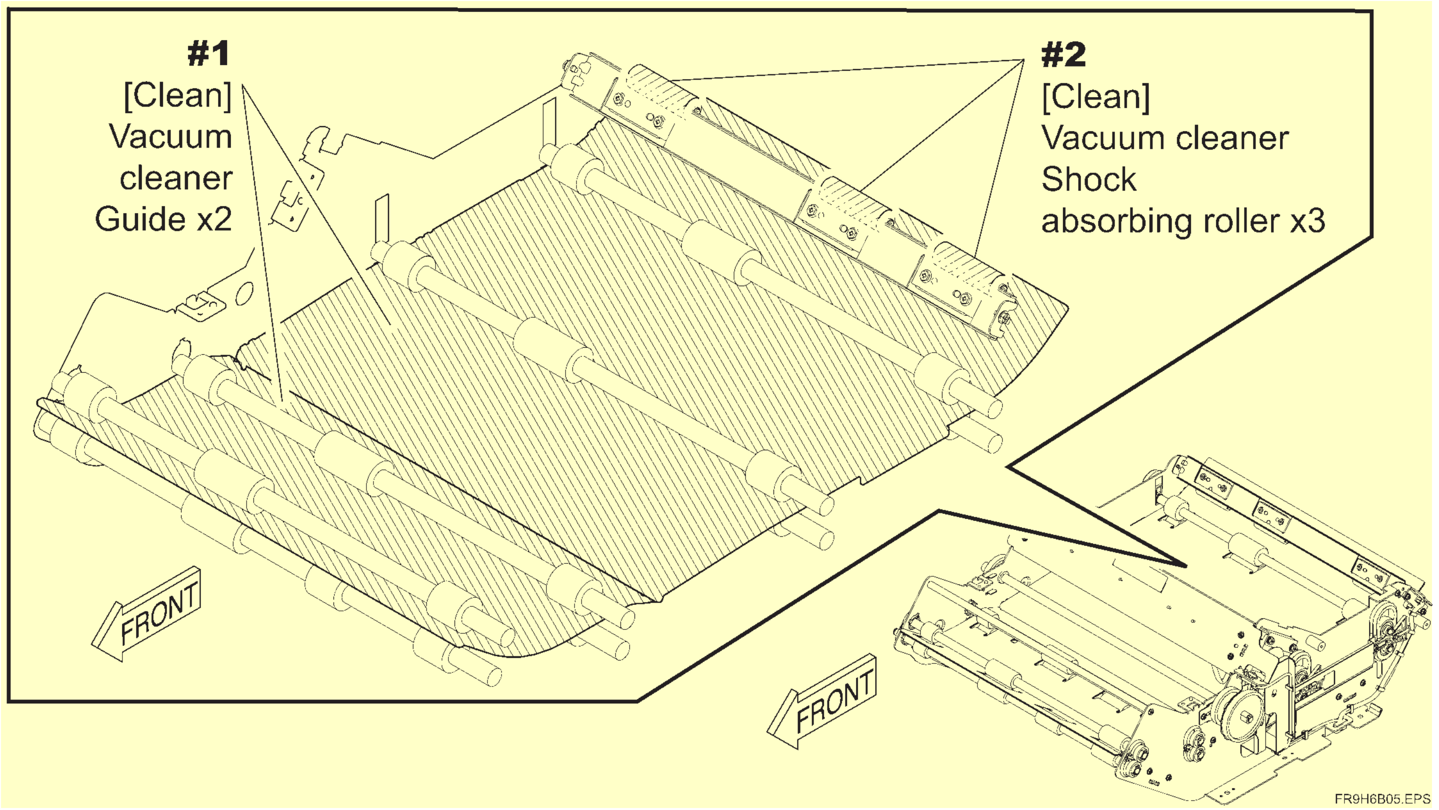
10.4 Cleaning the Guides, Shock Absorbing Rollers, and Rubber Rollers

2Y

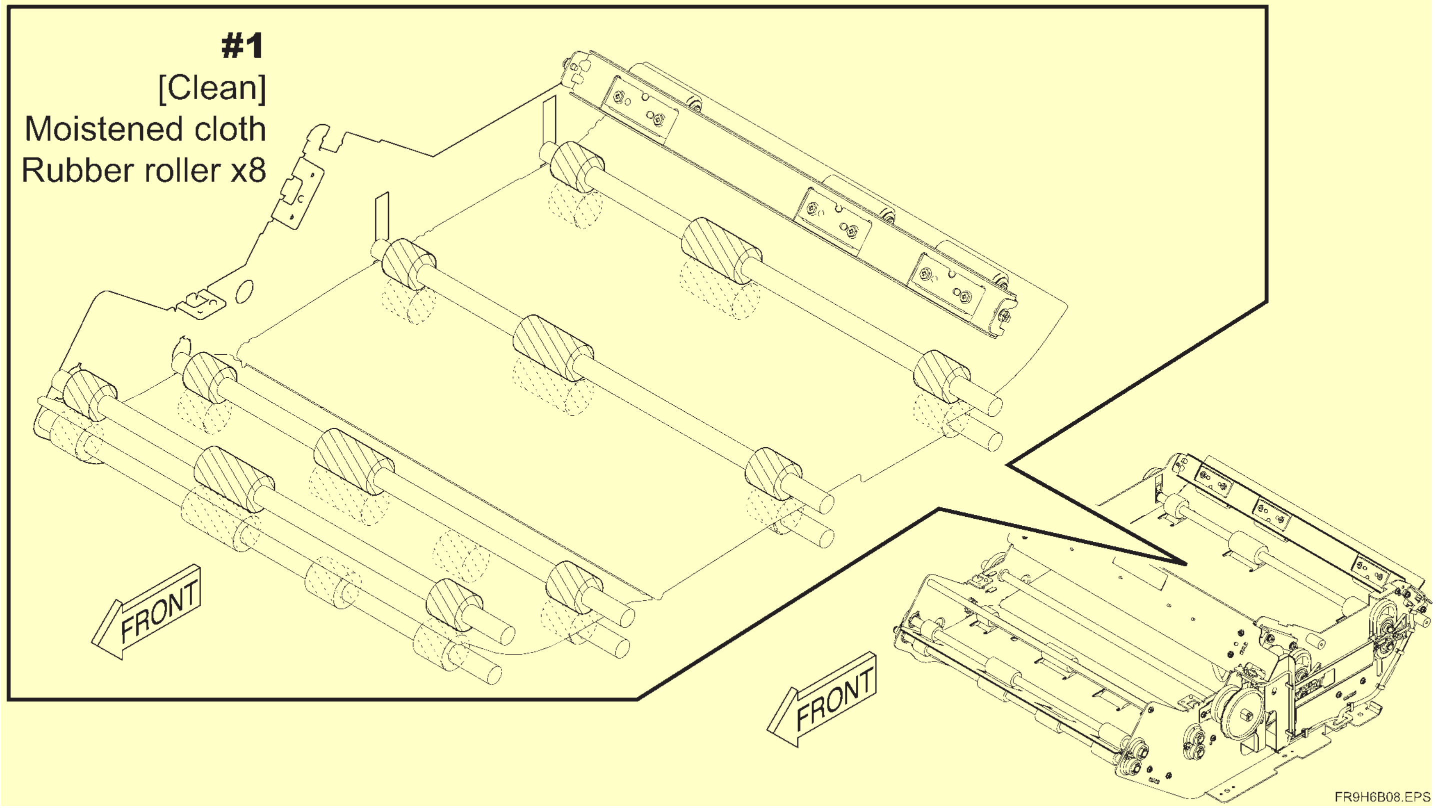
1. **Remove the guides.**


#1
[Remove]
DT3x6 (x2)
Guide
FRONT
FR9H6B04.EPS

2. **Clean the guides and shock absorbing rollers by use of a vacuum cleaner.**


#1
[Clean]
Vacuum cleaner
Guide x2
#2
[Clean]
Vacuum cleaner
Shock absorbing roller x3
FRONT
FRONT
FR9H6B05.EPS

3. **Wipe the rubber rollers with a moistened cloth.**


#1
[Clean]
Moistened cloth
Rubber roller x8
FRONT
FRONT
FR9H6B08.EPS

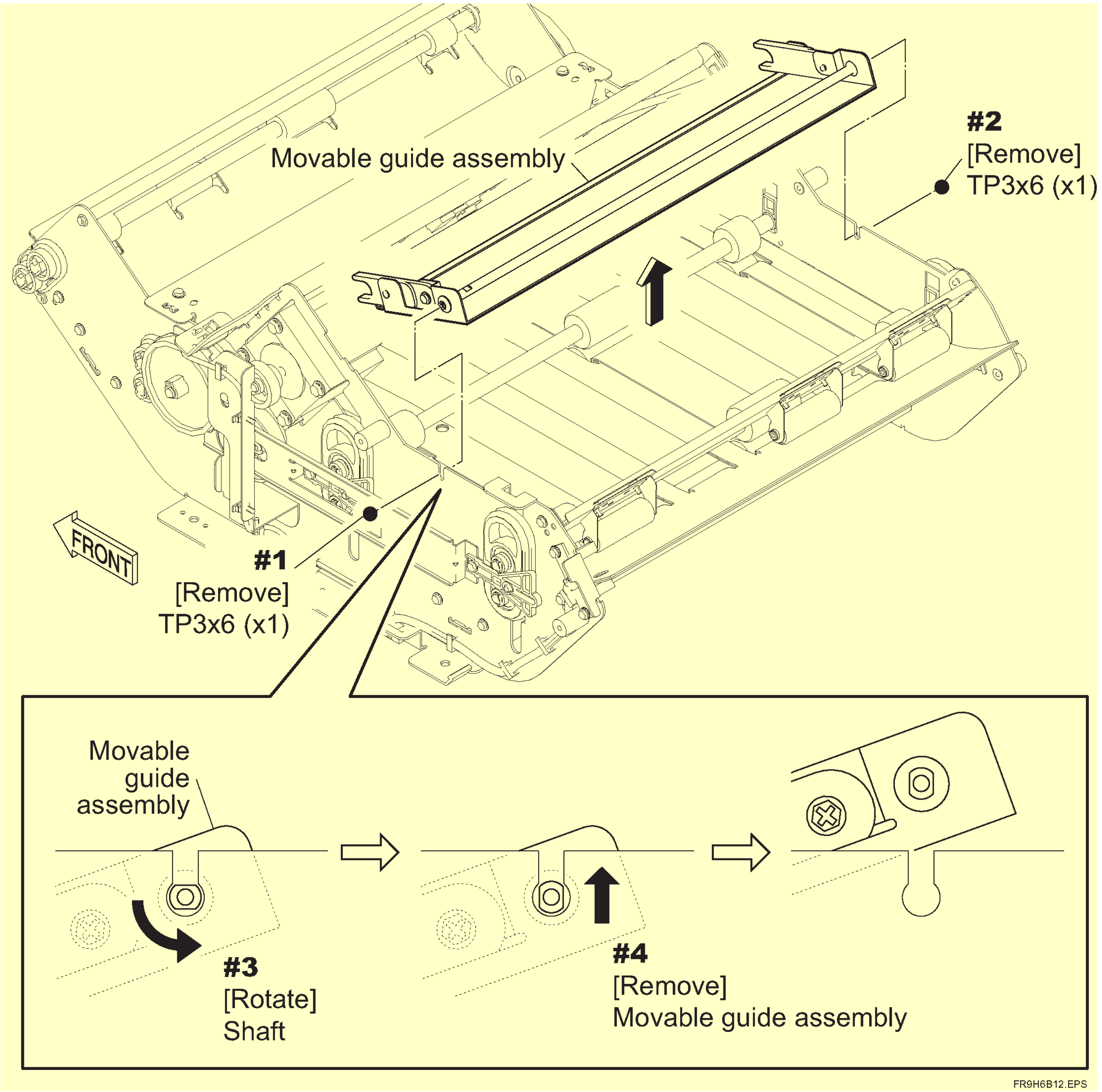
4. **Reinstall the guides in reverse order of removal.**

2Y ☞ {PM:10.5}

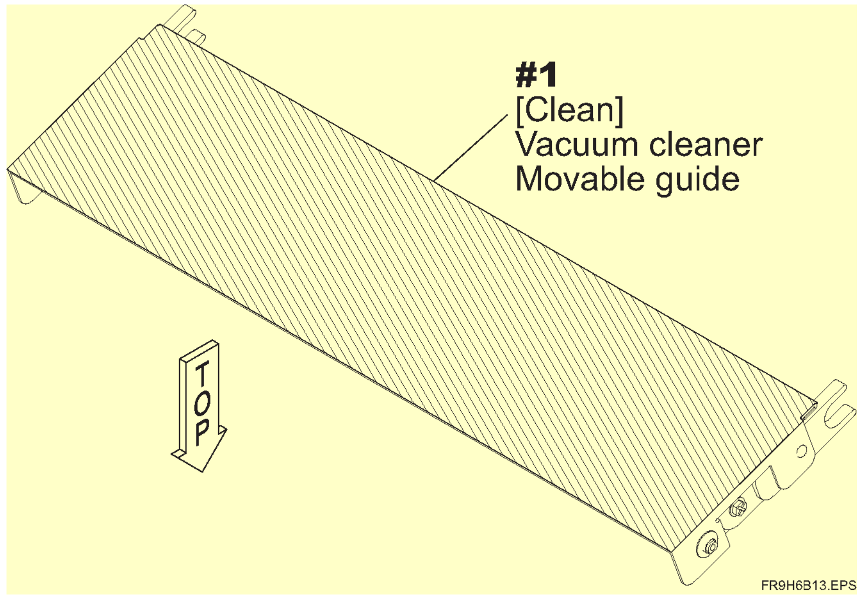
10.5 Cleaning the Movable Guide Assembly

2Y

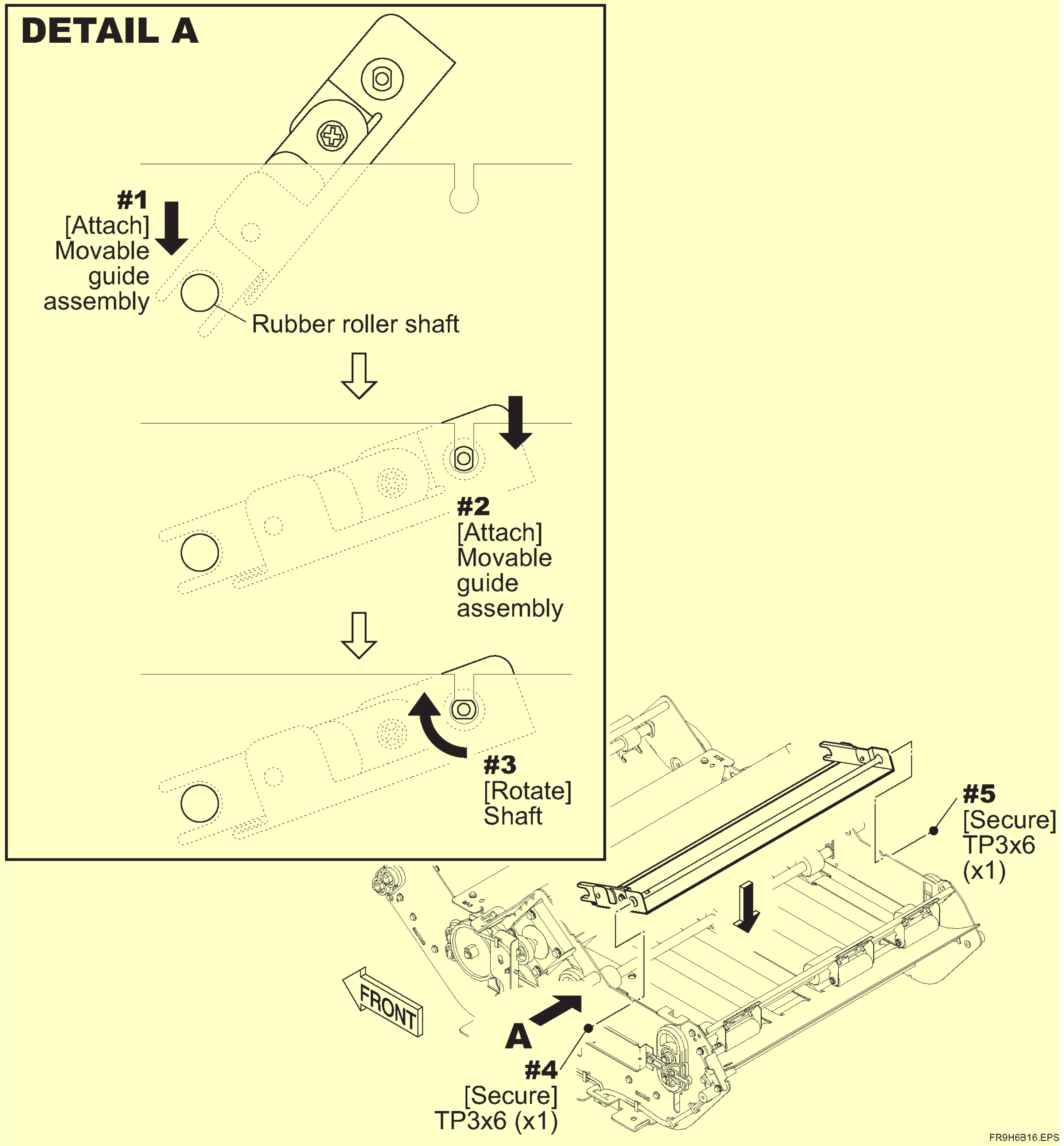
1. **Remove the movable guide assembly.**


Movable guide assembly
#2
[Remove]
TP3x6 (x1)
FRONT
#1
[Remove]
TP3x6 (x1)
Movable guide assembly
#3
[Rotate]
Shaft
#4
[Remove]
Movable guide assembly
FR9H6B12.EPS

2. **Clean the movable guide assembly by use of a vacuum cleaner.**


#1
[Clean]
Vacuum cleaner
Movable guide
TOP
FR9H6B13.EPS

3. Reinstall the movable guide assembly.


DETAIL A
#1
[Attach]
Movable guide assembly
Rubber roller shaft
#2
[Attach]
Movable guide assembly
#3
[Rotate]
Shaft
#5
[Secure]
TP3x6
(x1)
FRONT
A
#4
[Secure]
TP3x6 (x1)
FR9H6B16.EPS

2Y ☞ {PM:11.1}

11. Subscanning Unit

11.1 Removing the Upper Light-Collecting Guide

2Y

⚠ **CAUTION**

Never touch the light-receiving face of the light-collecting unit even when you are wearing gloves.

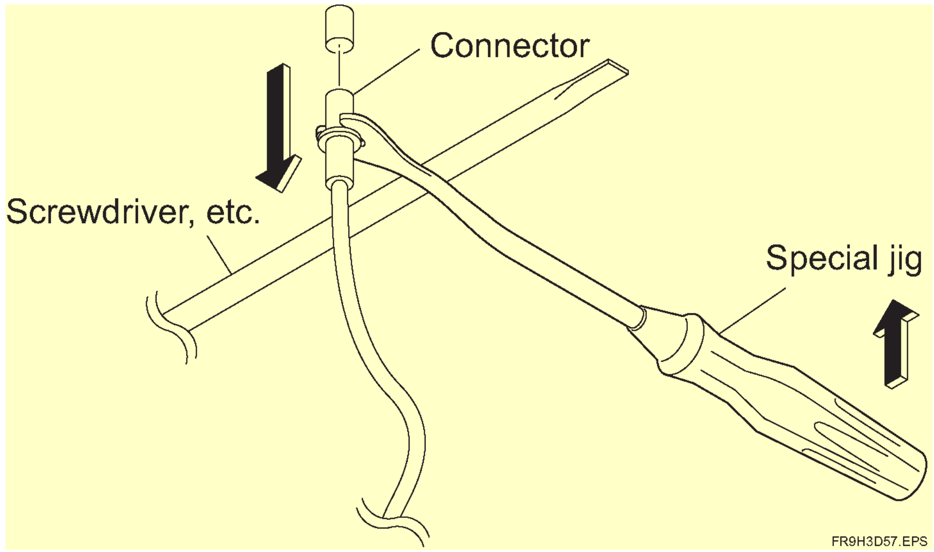
◆ ***INSTRUCTION*** ◆

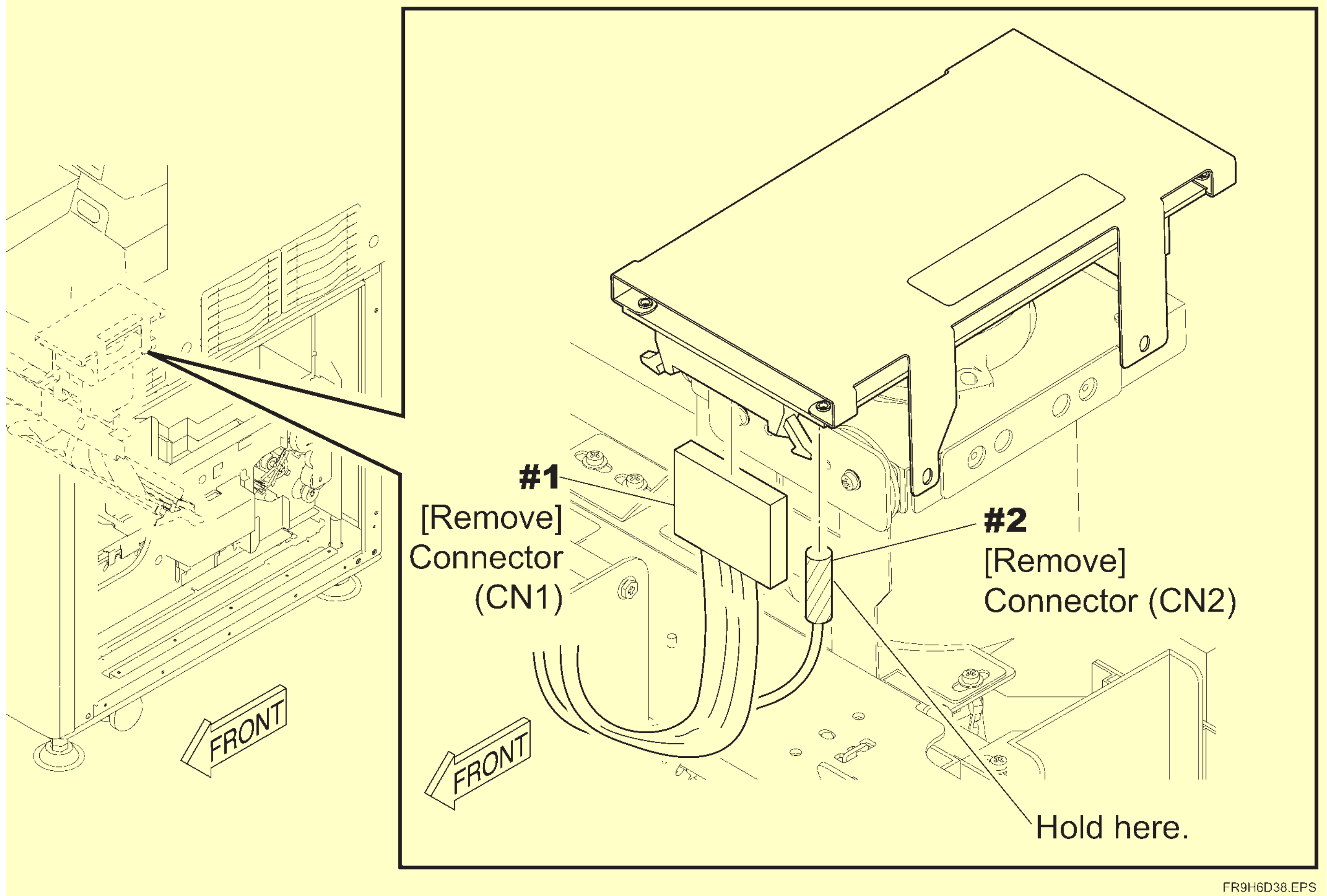
When servicing the light-collecting unit, wear gloves.

1. **Disconnect the connectors.**

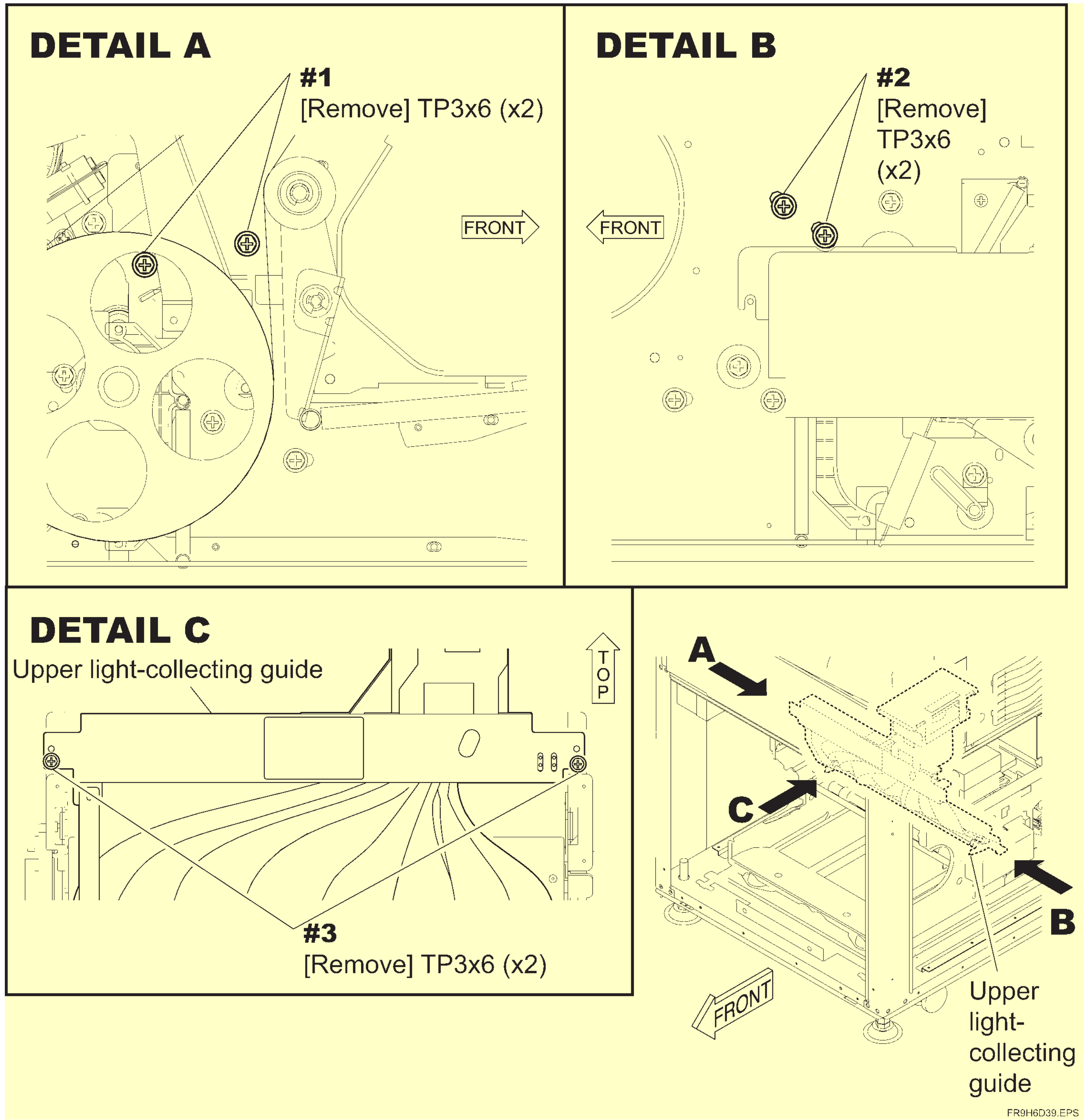
◆ ***NOTES*** ◆

- *To disconnect the CN2, use its special jig. If the jig is not used, the connector located on the board might be damaged.*
- *When disconnecting the connector by use of the special jig, use a screwdriver's shaft or the like as a pivot and detach it at right angles relative to the board.*

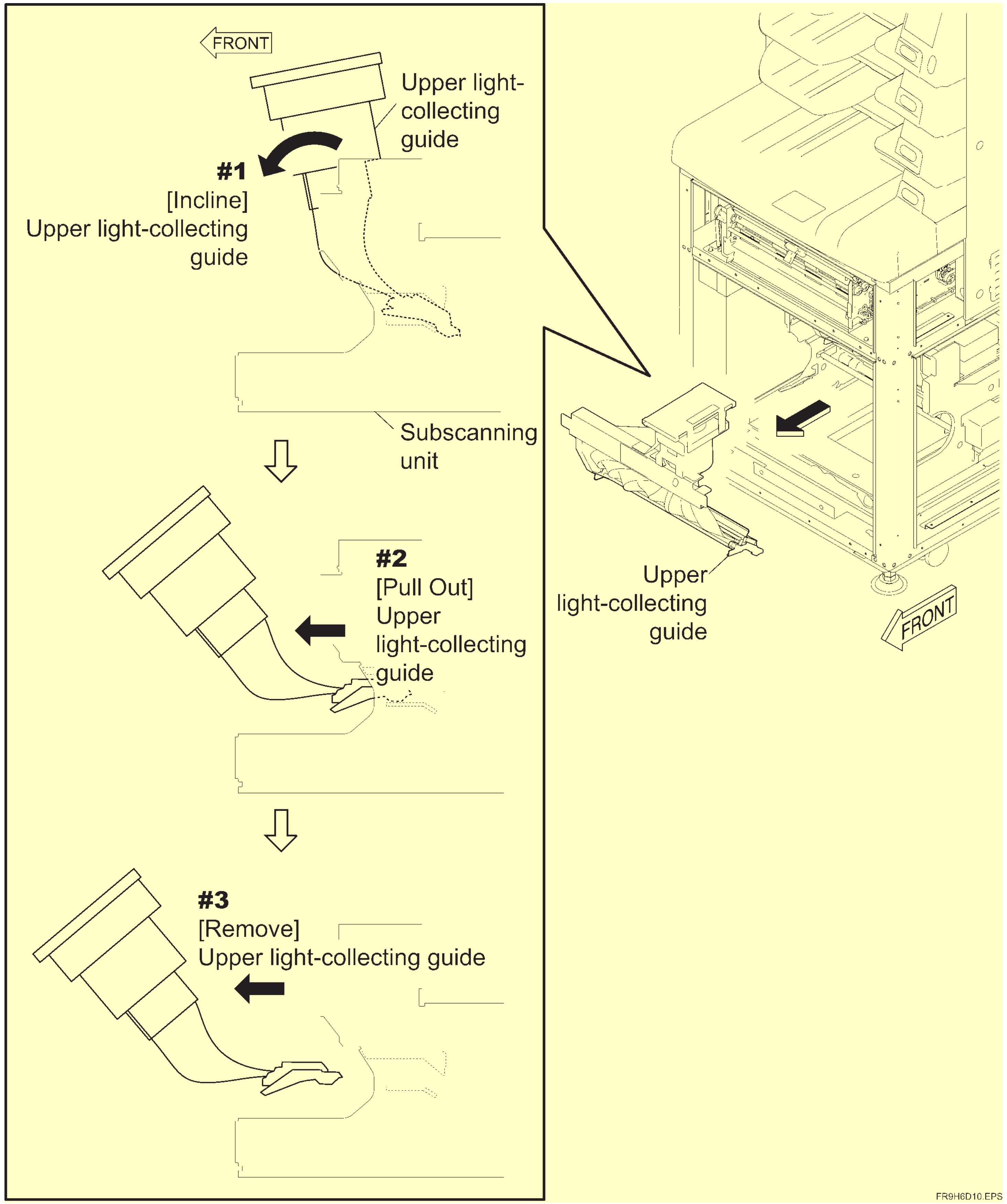

Connector
Screwdriver, etc.
Special jig
FR9H3D57.EPS


#1
[Remove]
Connector
(CN1)
#2
[Remove]
Connector (CN2)
Hold here.
FRONT
FRONT
FR9H6D38.EPS

2. **Remove the screws.**


DETAIL A
#1
[Remove] TP3x6 (x2)
FRONT
DETAIL B
#2
[Remove]
TP3x6
(x2)
FRONT
DETAIL C
Upper light-collecting guide
TOP
#3
[Remove] TP3x6 (x2)
A
C
B
FRONT
Upper
light-
collecting
guide
FR9H6D39.EPS

3. **Remove the upper light-collecting guide.**

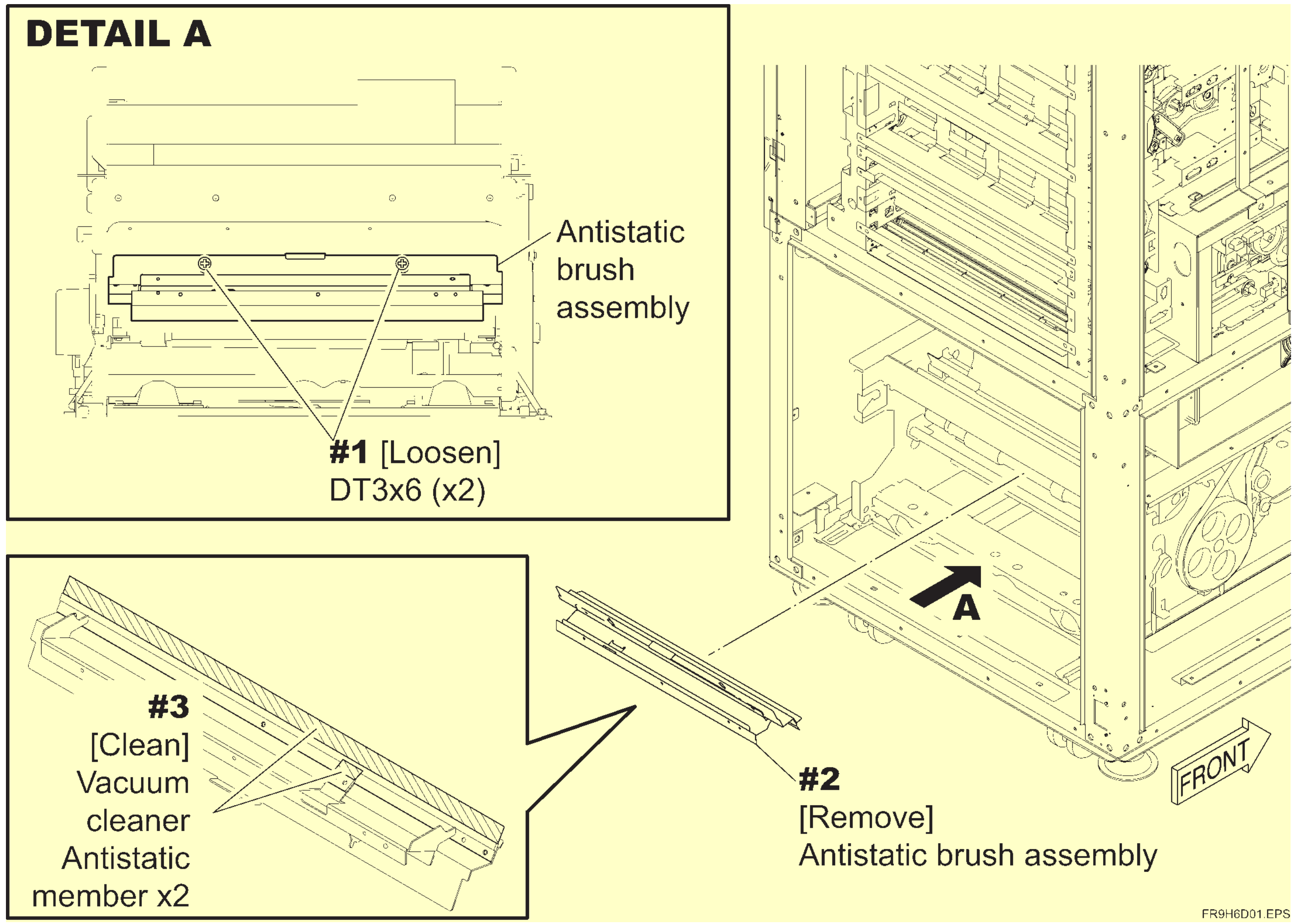

FRONT
Upper light-
collecting
guide
#1
[Incline]
Upper light-collecting
guide
Subscanning
unit
#2
[Pull Out]
Upper
light-collecting
guide
#3
[Remove]
Upper light-collecting guide
Upper
light-collecting
guide
FRONT
FR9H6D10.EPS

2Y ☞ {PM:11.2}

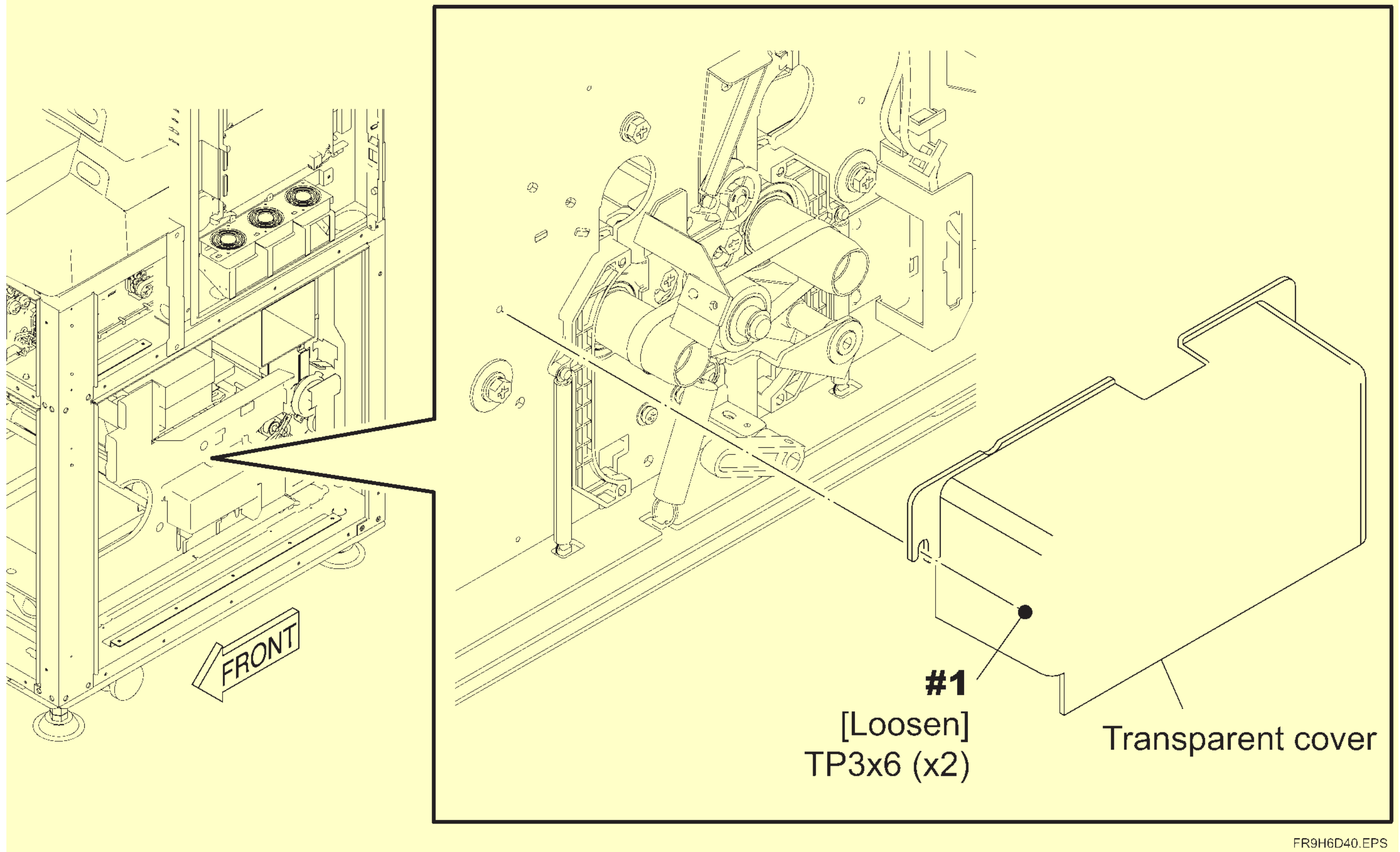
11.2 Cleaning the Antistatic Brush Assembly

2Y

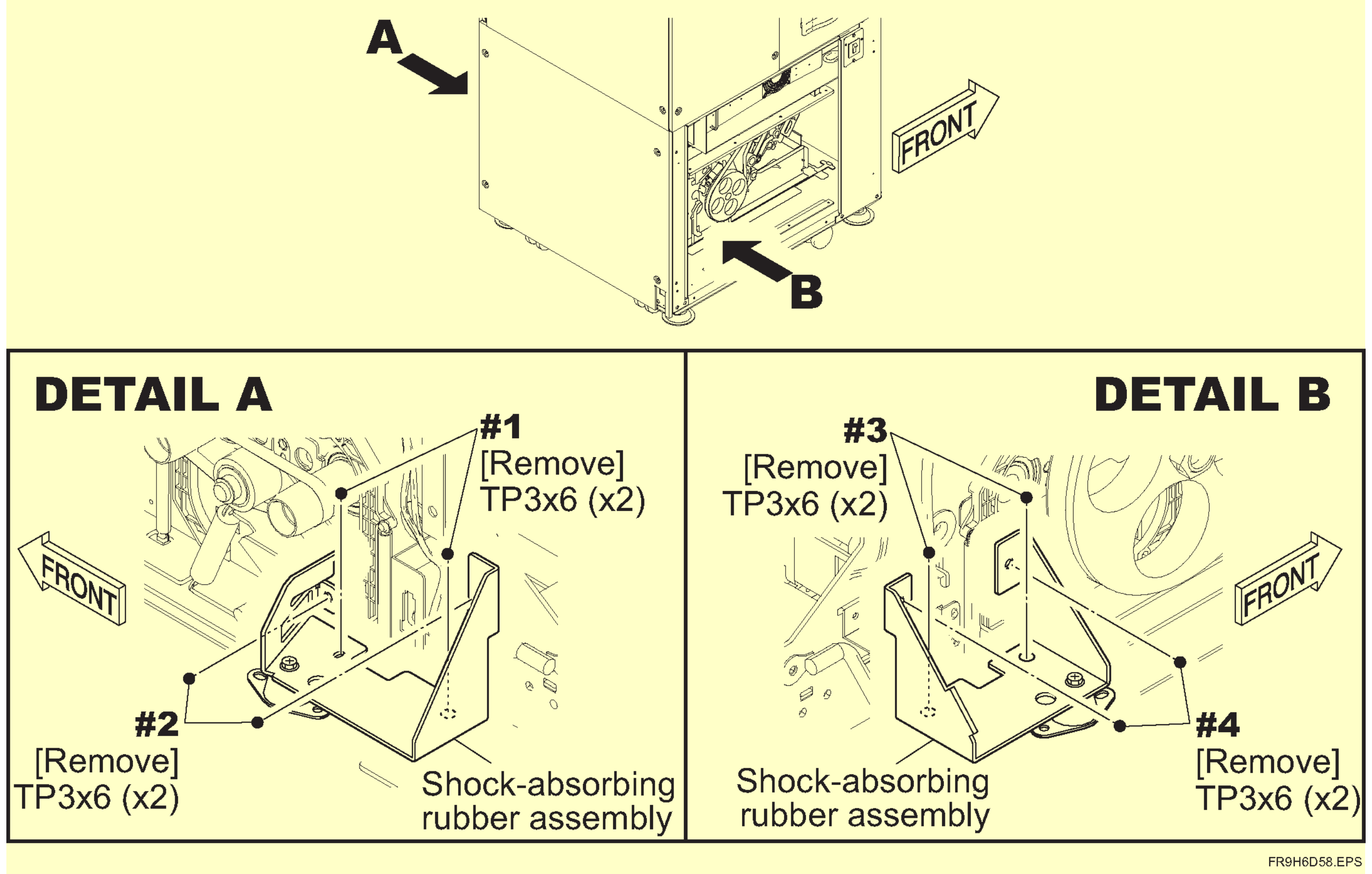
1. **Clean the antistatic brush assembly.**


DETAIL A
Antistatic brush assembly
#1 [Loosen] DT3x6 (x2)
#3 [Clean] Vacuum cleaner Antistatic member x2
A
#2 [Remove] Antistatic brush assembly
FRONT
FR9H6D01.EPS

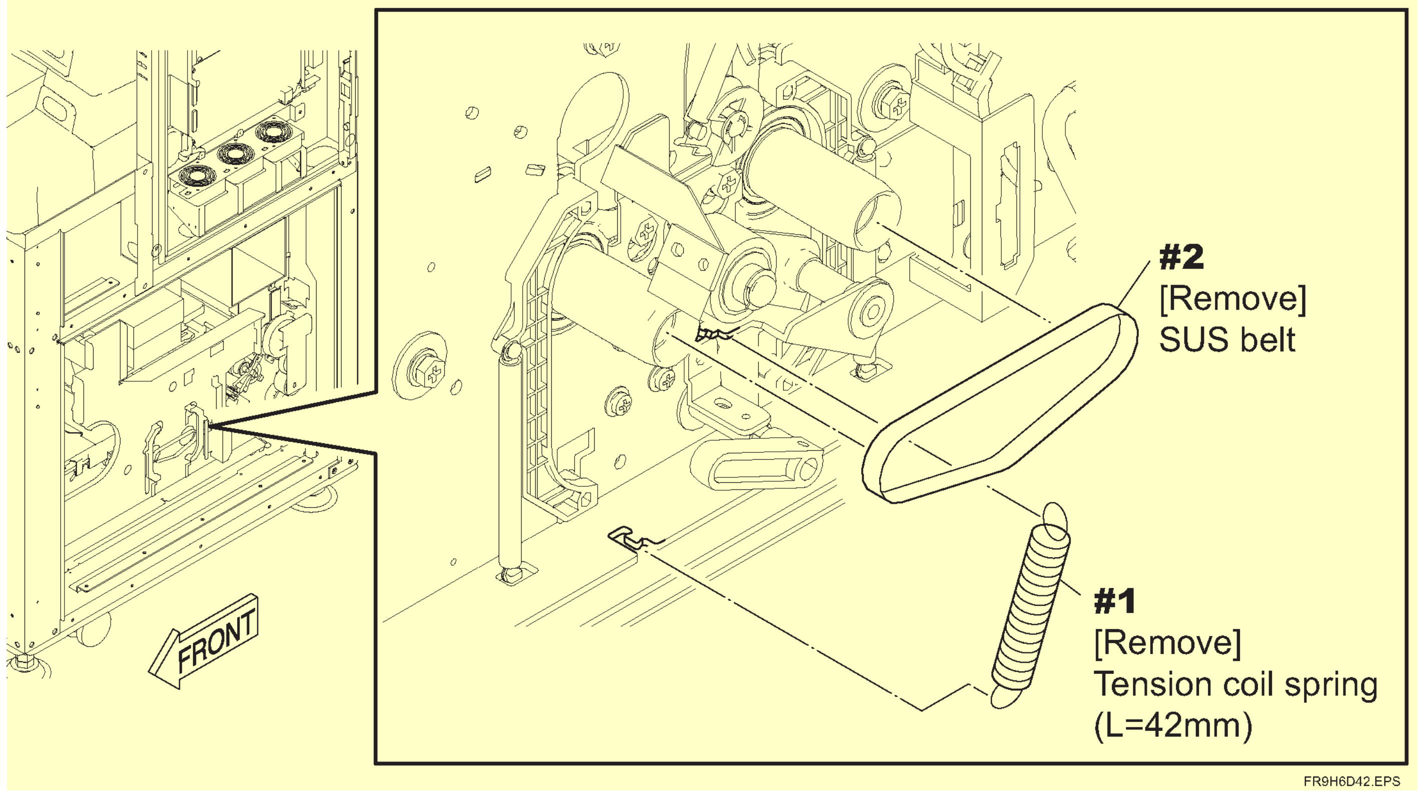
2. **Remove the transparent cover.**


FRONT
#1 [Loosen] TP3x6 (x2)
Transparent cover
FR9H6D40.EPS

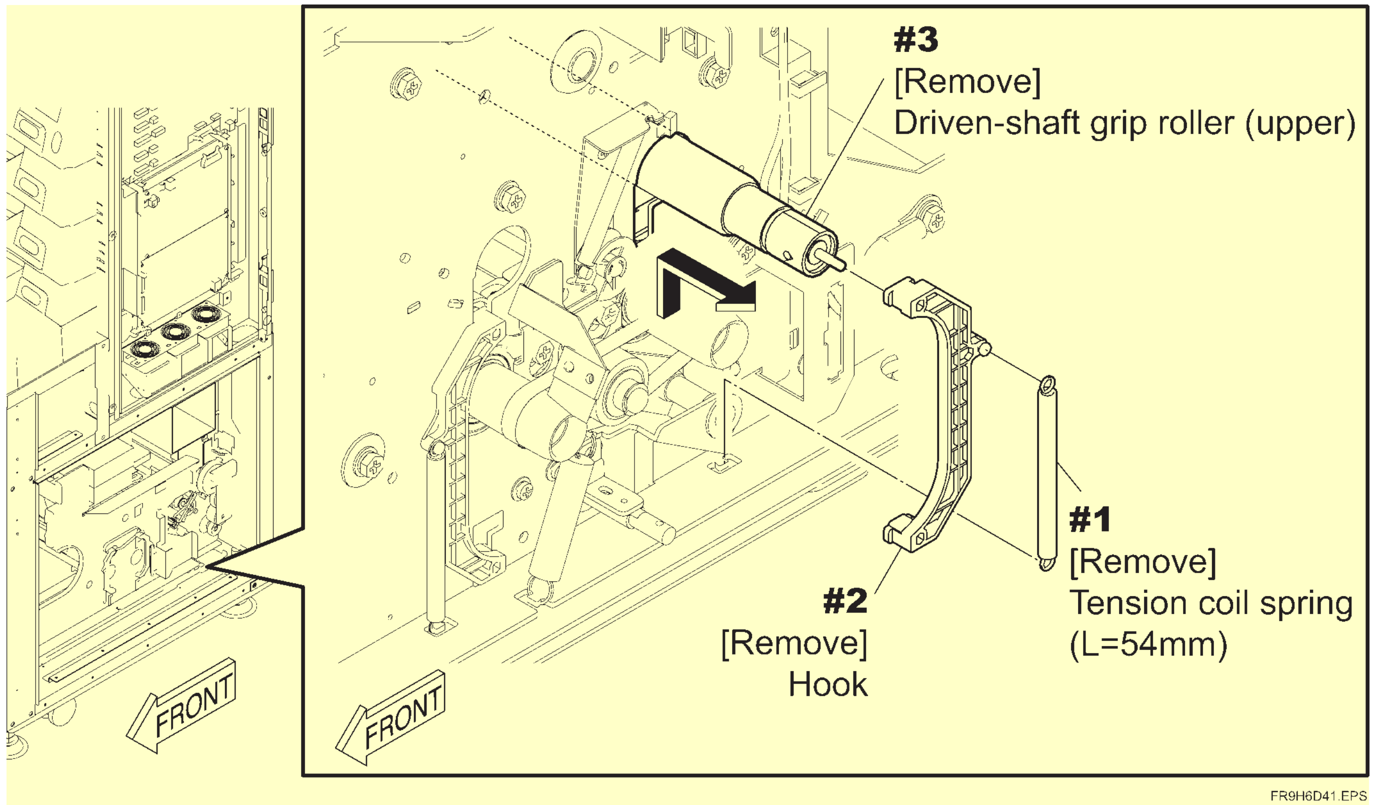
3. **Remove the shock-absorbing rubber assemblies.**


A
B
FRONT
DETAIL A
#1 [Remove] TP3x6 (x2)
#2 [Remove] TP3x6 (x2)
Shock-absorbing rubber assembly
DETAIL B
#3 [Remove] TP3x6 (x2)
#4 [Remove] TP3x6 (x2)
Shock-absorbing rubber assembly
FR9H6D58.EPS

4. **Remove the SUS belt.**


#2
[Remove]
SUS belt
#1
[Remove]
Tension coil spring
(L=42mm)
FRONT
FR9H6D42.EPS

5. **Remove the driven-shaft grip roller (upper).**

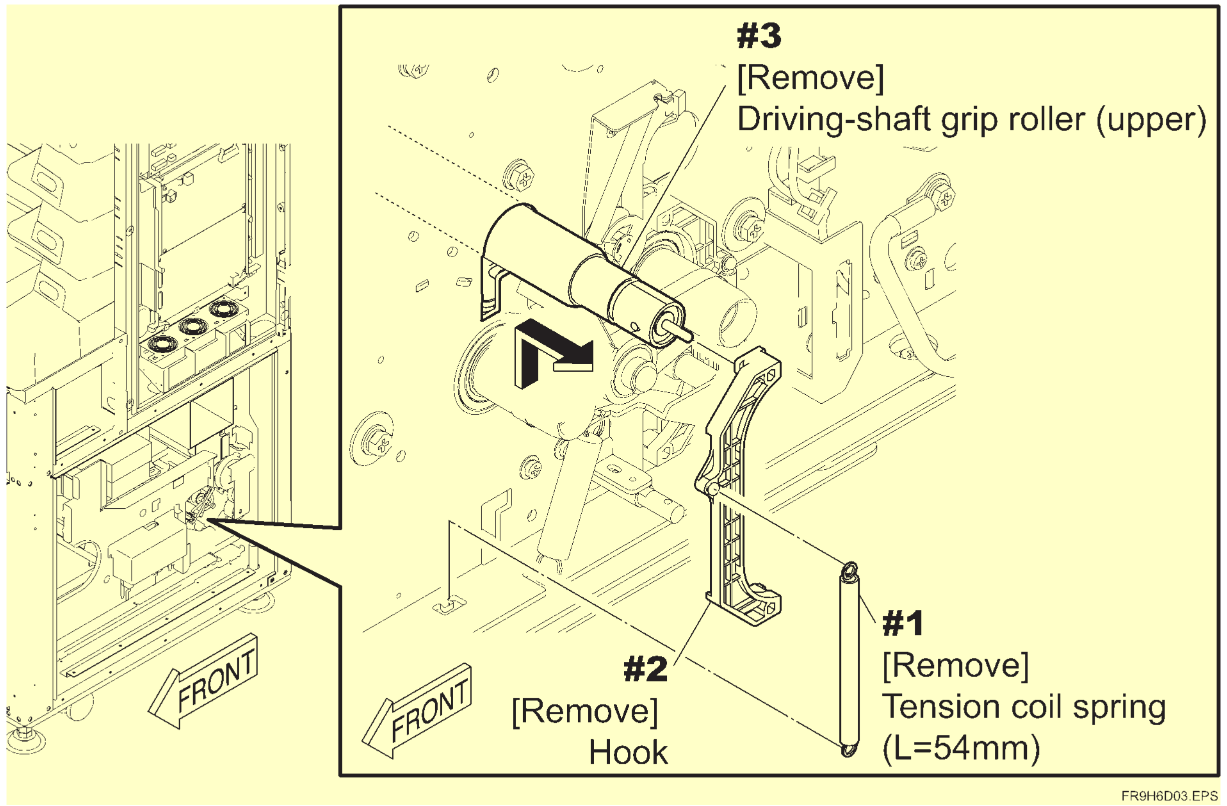

#3
[Remove]
Driven-shaft grip roller (upper)
#1
[Remove]
Tension coil spring
(L=54mm)
#2
[Remove]
Hook
FRONT
FRONT
FR9H6D41.EPS

2Y ☞ {PM:11.3}

11.3 Removing the Driving-Shaft Grip Roller

2Y ☞ {PM:11.4}

1. Remove the driving-shaft grip roller (upper).


#3
[Remove]
Driving-shaft grip roller (upper)
#2
[Remove]
Hook
#1
[Remove]
Tension coil spring
(L=54mm)
FRONT
FRONT
FR9H6D03.EPS

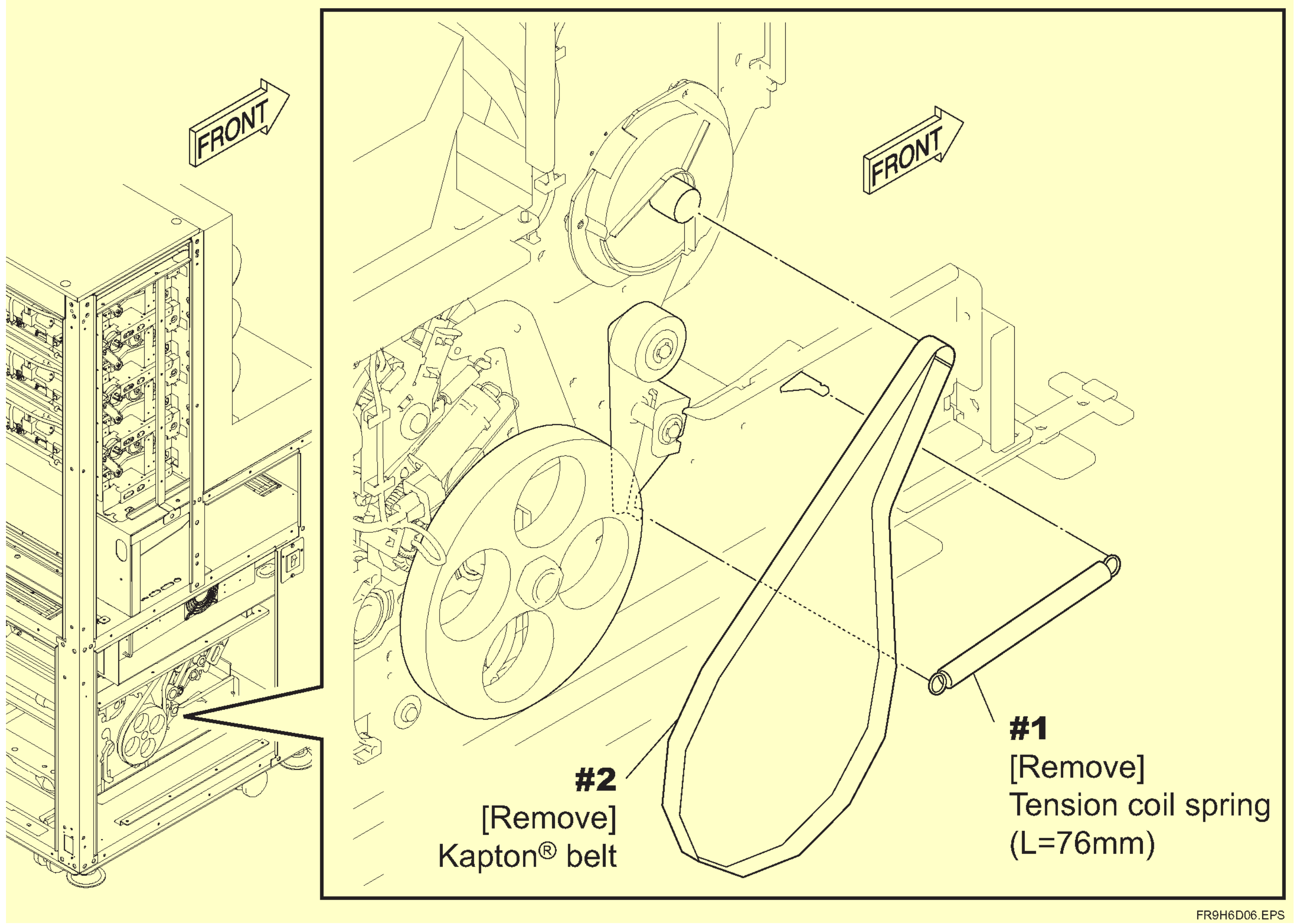
11.4 Removing the Kapton® Belt

2Y ☞ {PM:11.6}

1. Remove the Kapton® belt.

◆ NOTE ◆

After removing the tension coil spring, support the tensioner by hand. Otherwise, the tensioner might incline by its own weight, thereby damaging the Kapton® belt.

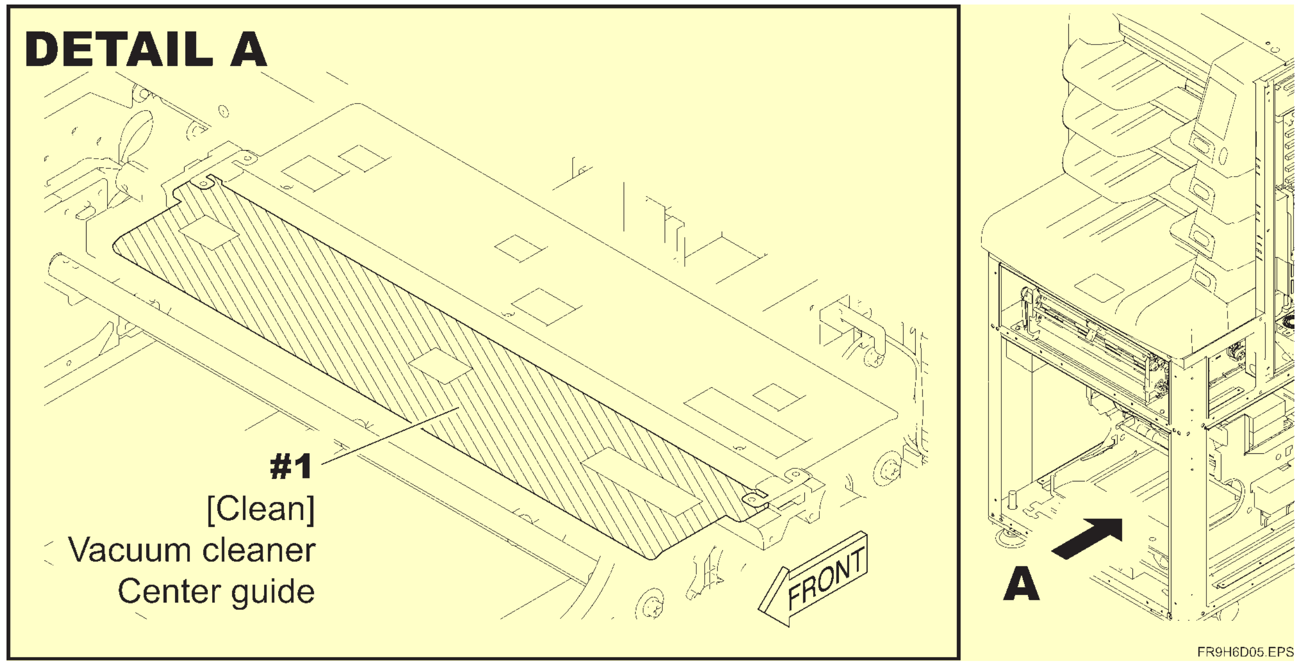

FRONT
FRONT
#2
[Remove]
Kapton® belt
#1
[Remove]
Tension coil spring
(L=76mm)
FR9H6D06.EPS

11.5 Nothing

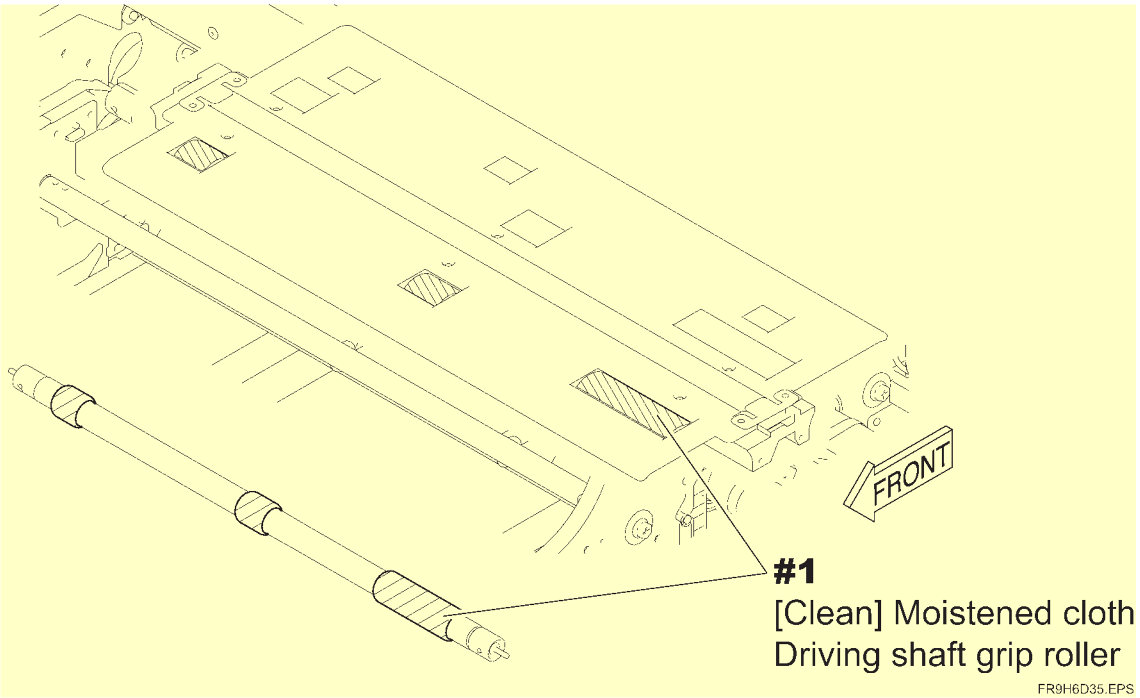
11.6 Cleaning the Driving Shaft Grip Rollers

2Y ☞ {PM:11.7}

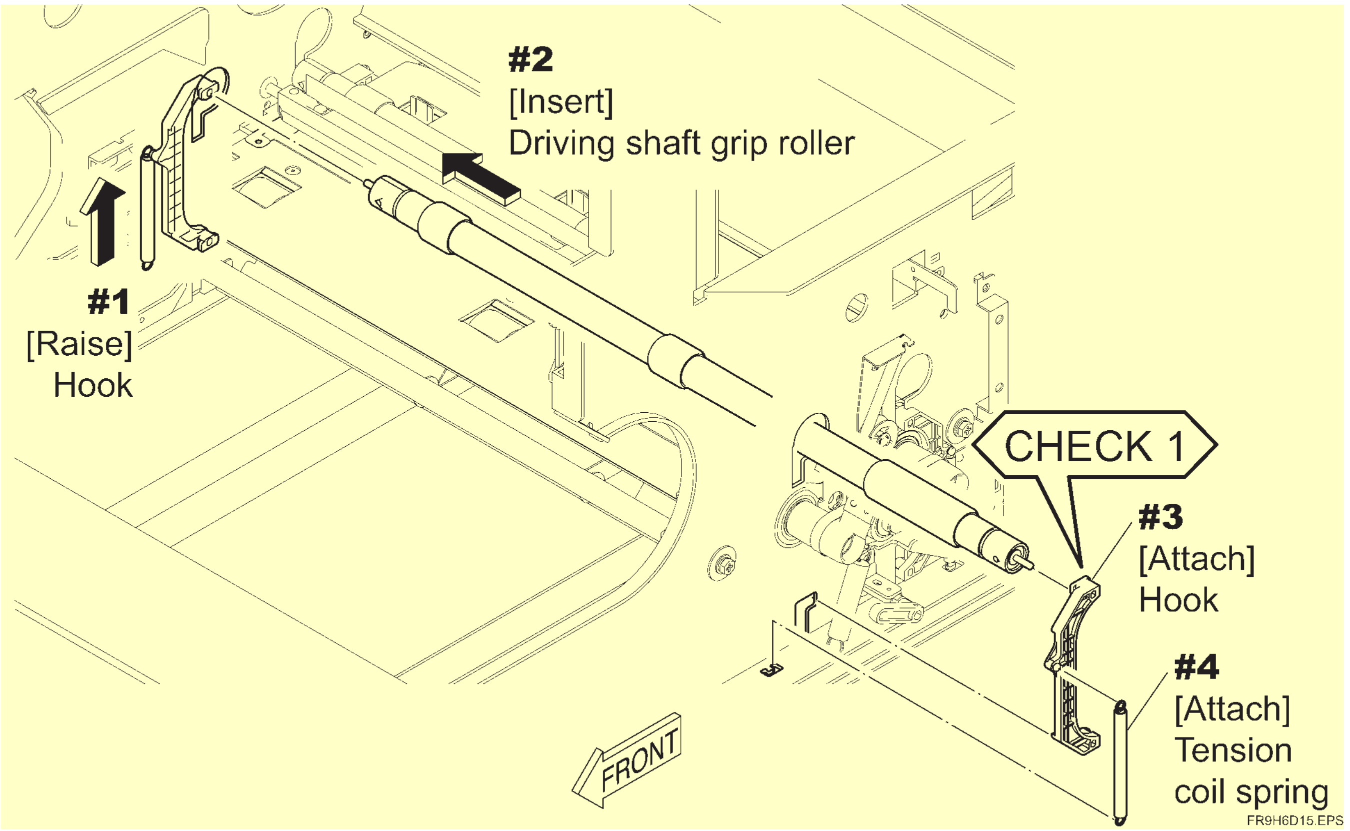
1. **Clean the center guide by use of a vacuum cleaner.**


DETAIL A
#1
[Clean]
Vacuum cleaner
Center guide
FRONT
A
FR9H6D05.EPS

2. **Clean the driving shaft grip rollers (upper and lower) with a moistened cloth.**

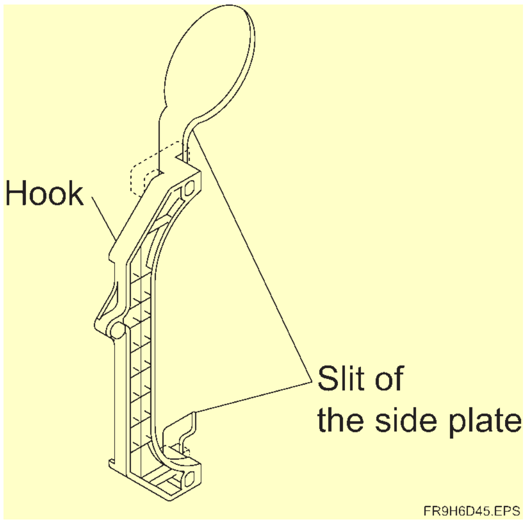

FRONT
#1
[Clean] Moistened cloth
Driving shaft grip roller
FR9H6D35.EPS

3. **Attach the driving shaft grip roller.**


#2
[Insert]
Driving shaft grip roller
#1
[Raise]
Hook
CHECK 1
#3
[Attach]
Hook
#4
[Attach]
Tension
coil spring
FRONT
FR9H6D15.EPS

- **CHECK 1**

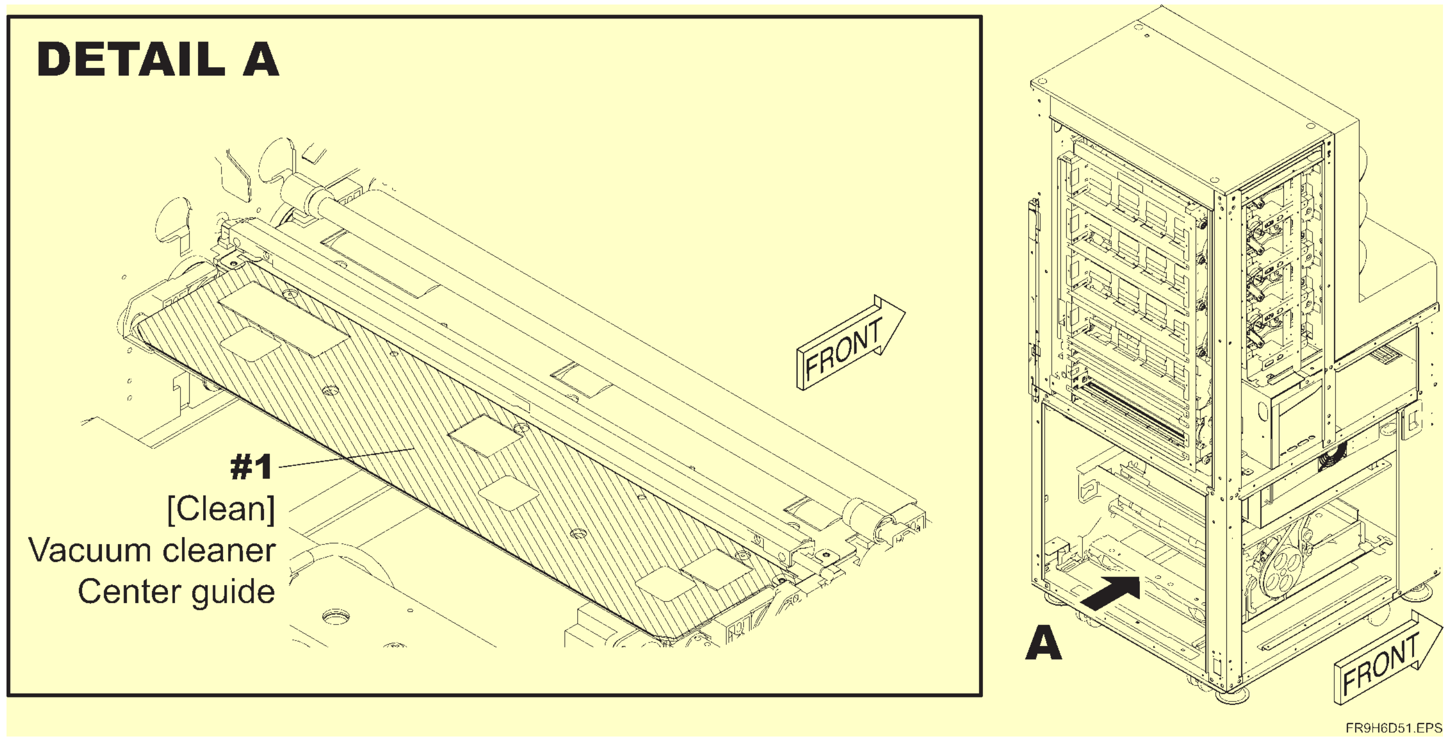
When attaching the hook, securely fit it into the slit of the side plate.


Hook
Slit of
the side plate
FR9H6D45.EPS

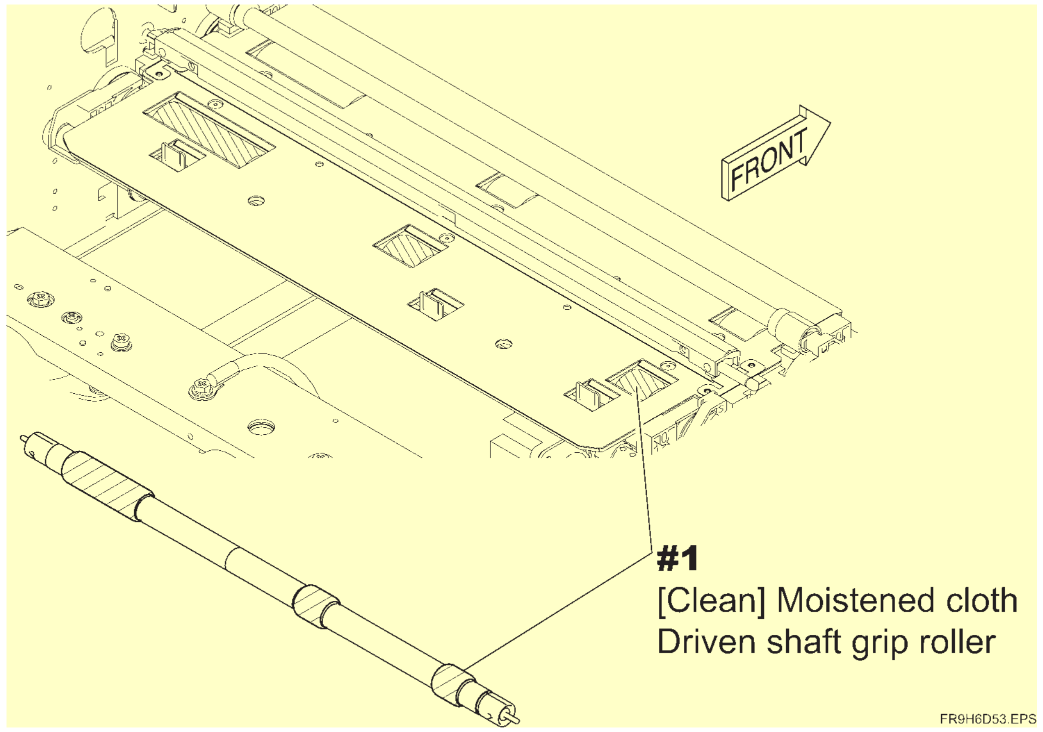
11.7 Cleaning the Driven Shaft Grip Rollers

2Y ☞ {PM:11.8}

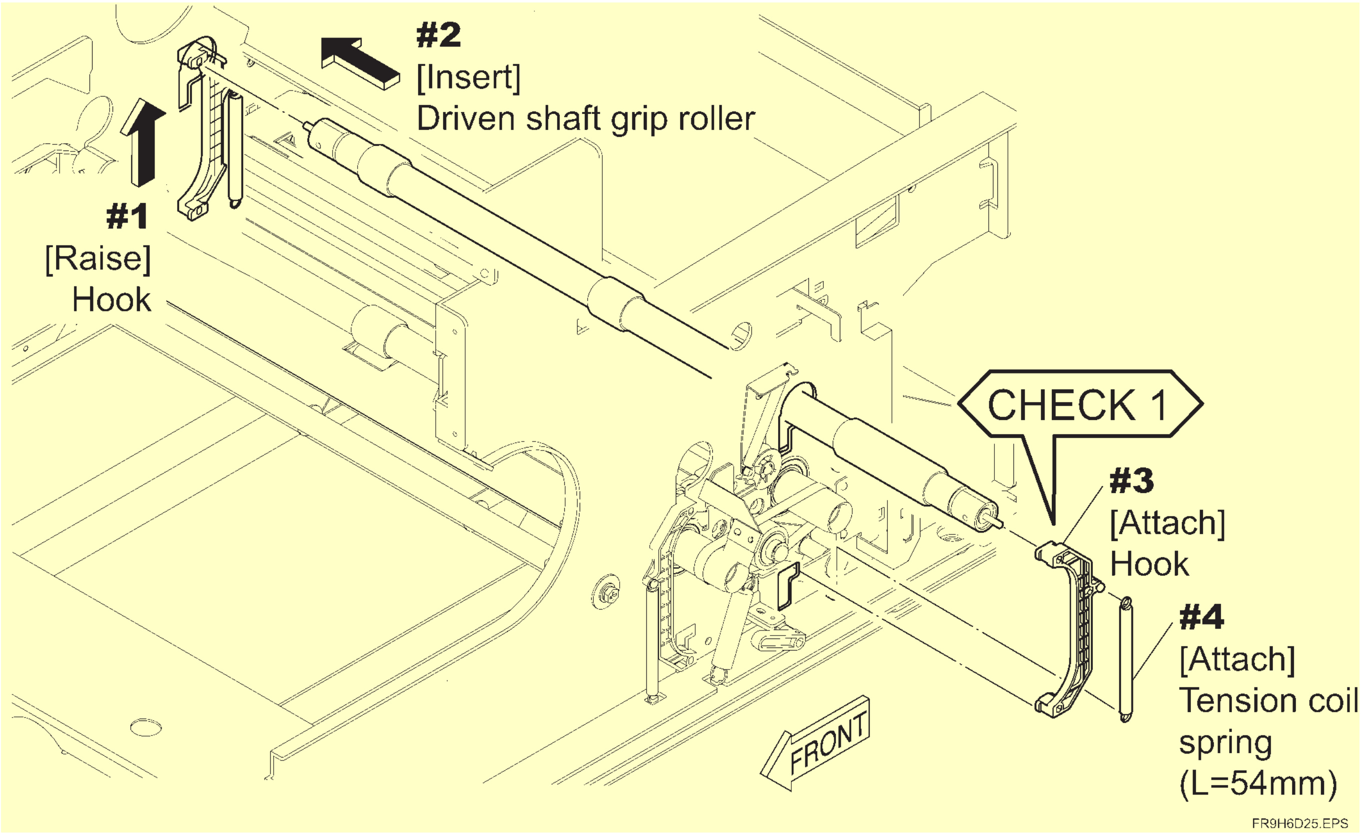
1. **Clean the center guide by use of a vacuum cleaner.**


DETAIL A
#1
[Clean]
Vacuum cleaner
Center guide
FRONT
A
FRONT
FR9H6D51.EPS

2. **Clean the driven shaft grip rollers (upper and lower) with a moistened cloth.**

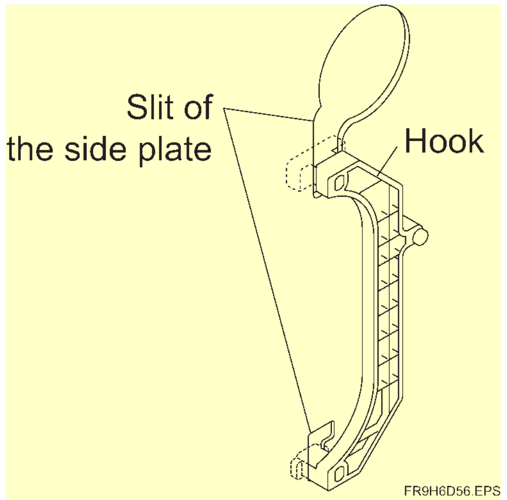

FRONT
#1
[Clean] Moistened cloth
Driven shaft grip roller
FR9H6D53.EPS

3. **Attach the driven shaft grip roller.**


#2
[Insert]
Driven shaft grip roller
#1
[Raise]
Hook
CHECK 1
#3
[Attach]
Hook
#4
[Attach]
Tension coil
spring
(L=54mm)
FRONT
FR9H6D25.EPS

- **CHECK 1**

When attaching the hook, securely fit it into the slit of the side plate.


Slit of
the side plate
Hook
FR9H6D56.EPS

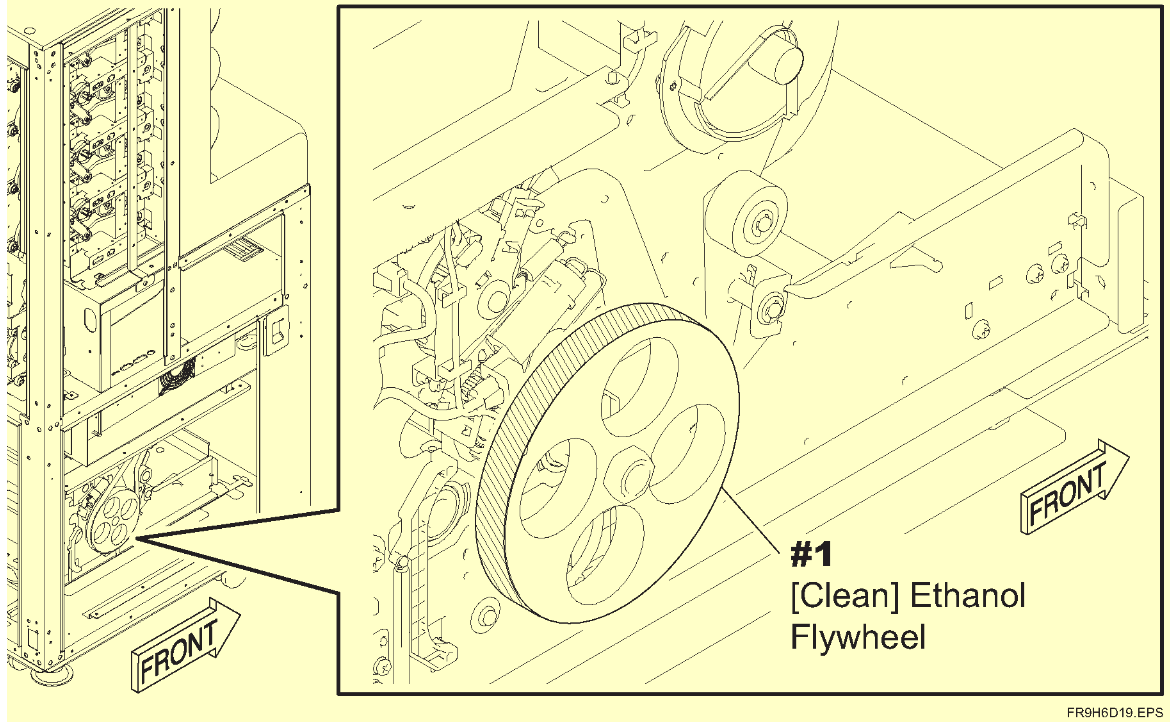
11.8 Cleaning the Flywheel and Kapton® Belt

2Y ☞ {PM:11.9}

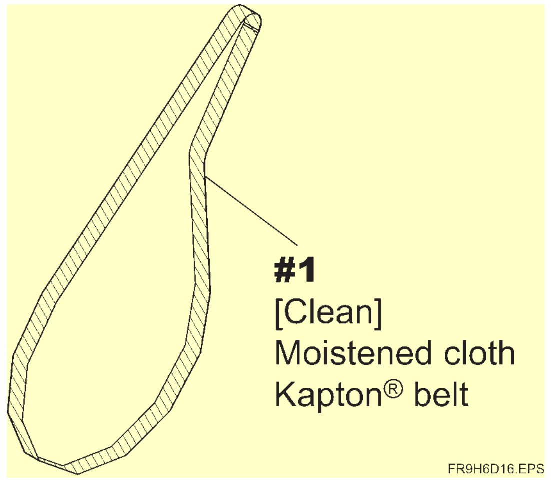
1. **Clean the flywheel by use of ethanol.**

◆ ***INSTRUCTION*** ◆

Use care not to damage the surface in contact with the Kapton® belt.


FRONT
FRONT
#1
[Clean] Ethanol
Flywheel
FR9H6D19.EPS

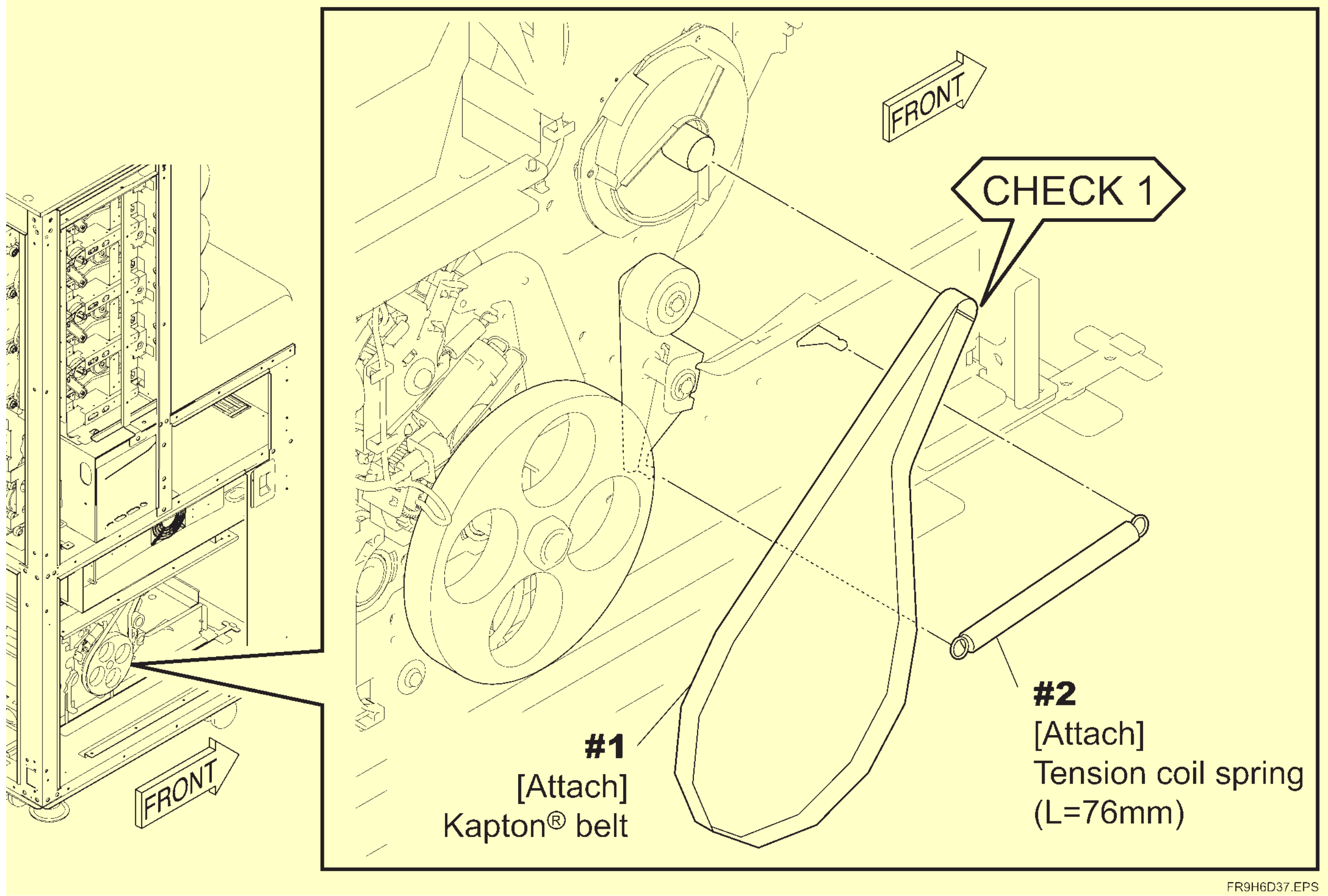
2. **Wipe the Kapton® belt with a moistened cloth.**


#1
[Clean]
Moistened cloth
Kapton® belt
FR9H6D16.EPS

◆ ***INSTRUCTION*** ◆

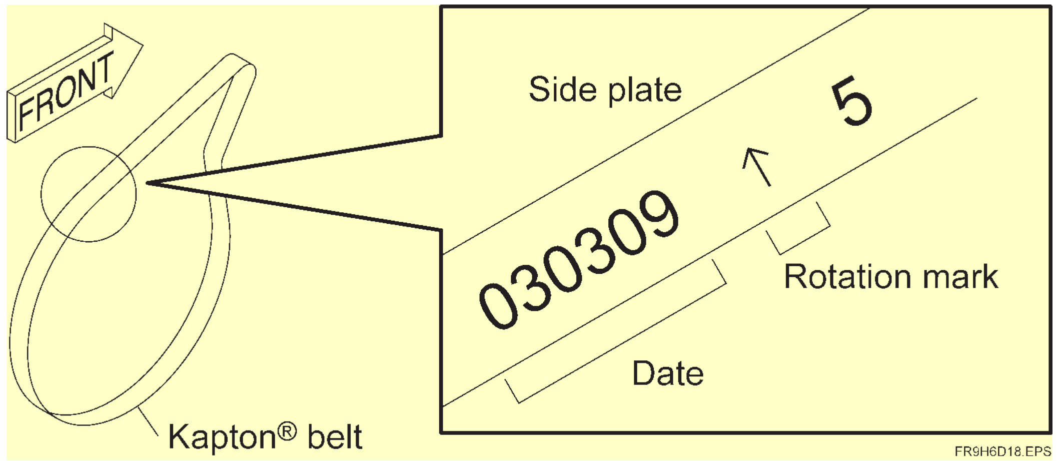
When cleaning the Kapton® belt, ethanol should not be used. If ethanol is used, the date and other markings on the Kapton® belt will be wiped out.

3. **Reinstall the Kapton® belt.**


FRONT
CHECK 1
FRONT
#1
[Attach]
Kapton® belt
#2
[Attach]
Tension coil spring
(L=76mm)
FR9H6D37.EPS

● **CHECK 1**

- The Kapton® belt should be mounted with its date indicating side up, so that the arrow mark faces the side plate.

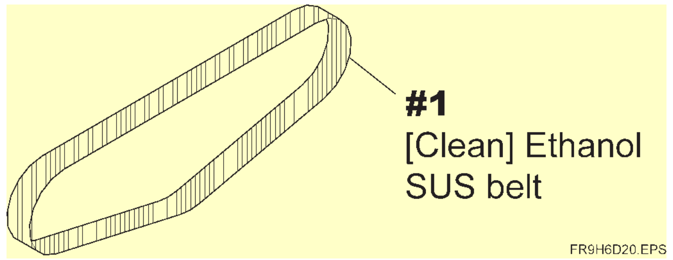

FRONT
Side plate
5
030309
Rotation mark
Date
Kapton® belt
FR9H6D18.EPS

- After mounting the Kapton® belt, manually rotate the flywheel to verify that the Kapton® belt does not come off.

11.9 Cleaning the SUS Belt

2Y

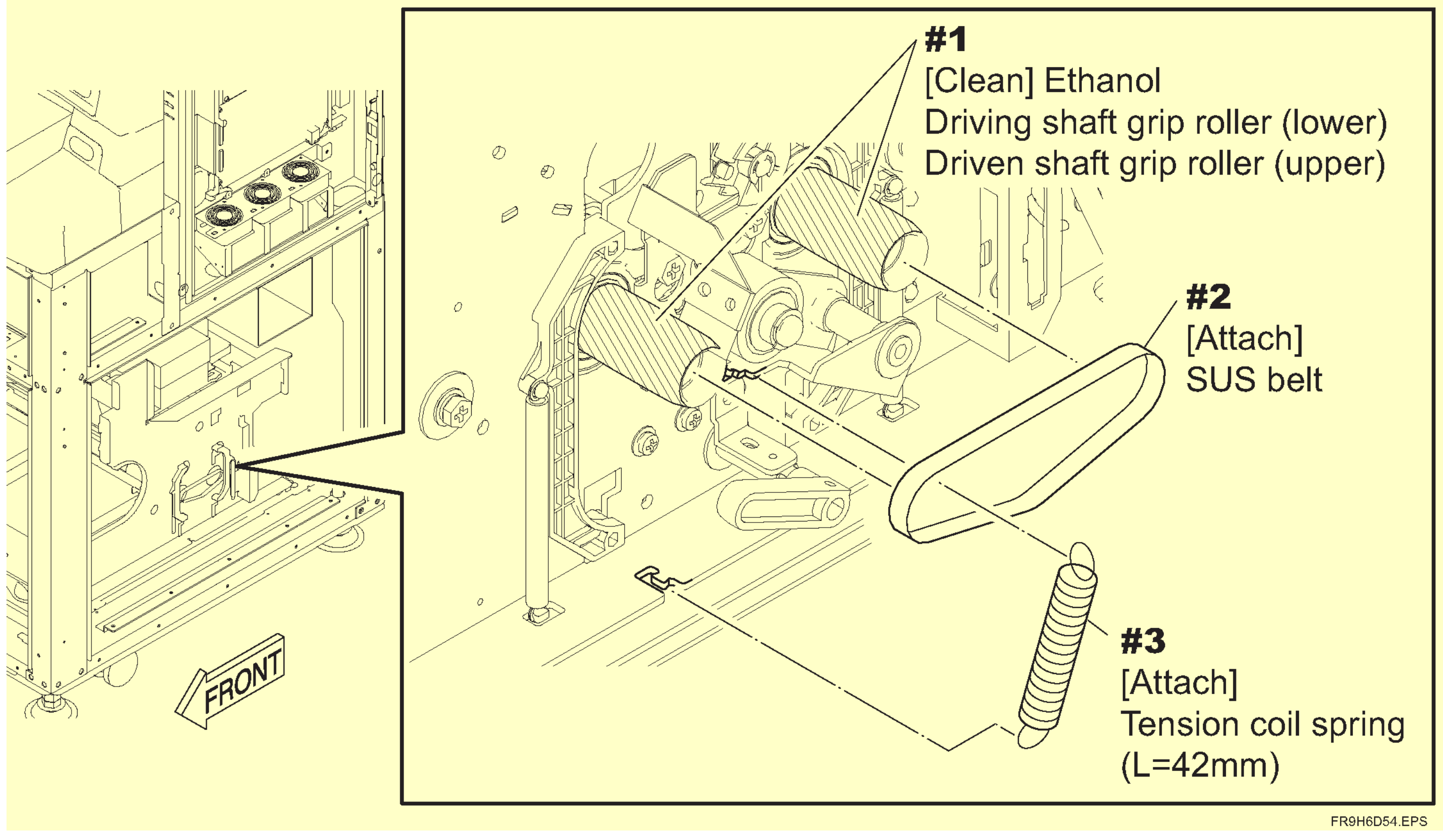
1. **Clean the SUS belt by use of ethanol.**


#1
[Clean] Ethanol
SUS belt
FR9H6D20.EPS

2. **Reinstall the SUS belt.**

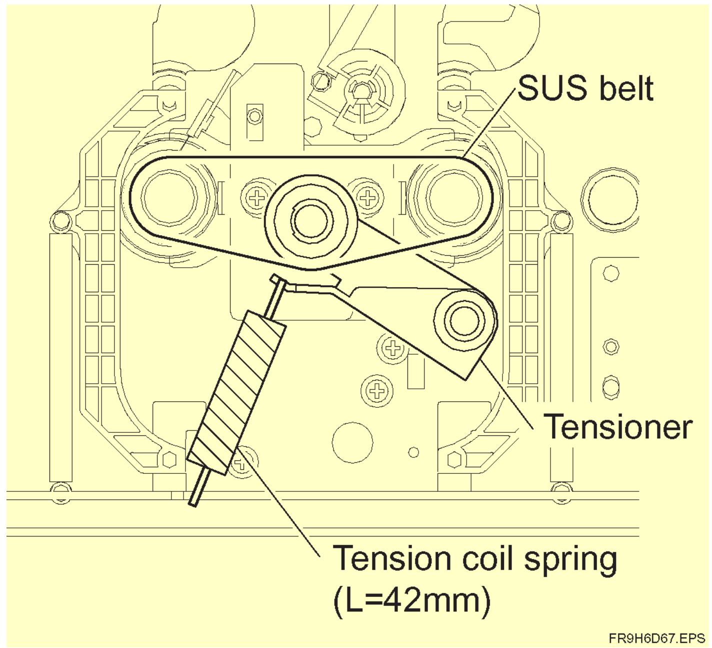
◆ INSTRUCTION ◆

After installing the SUS belt, rotate the driving shaft by hand to verify that the SUS belt does not come off.

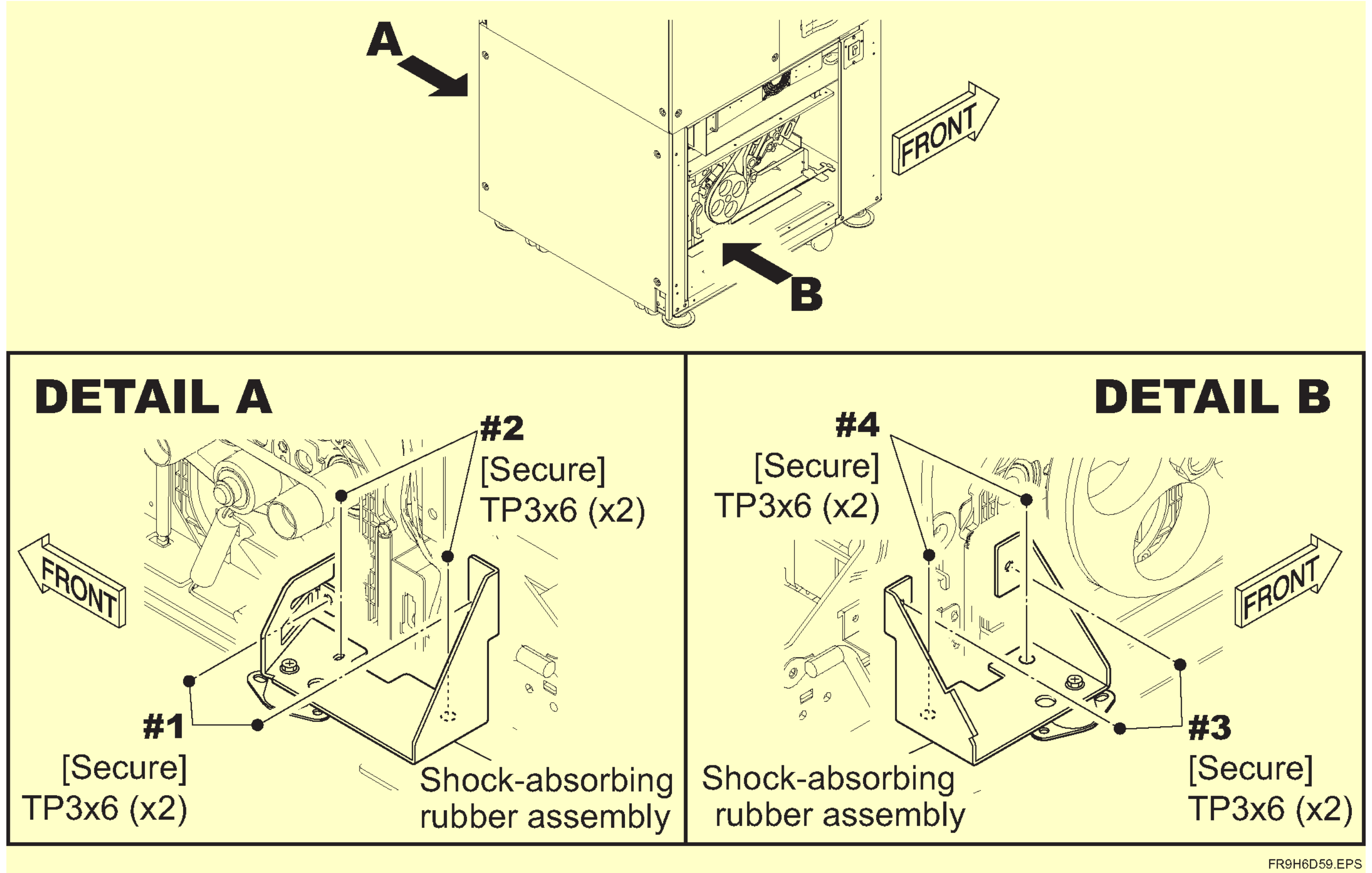

#1
[Clean] Ethanol
Driving shaft grip roller (lower)
Driven shaft grip roller (upper)
#2
[Attach]
SUS belt
#3
[Attach]
Tension coil spring
(L=42mm)
FRONT
FR9H6D54.EPS

◇ *REFERENCE* ◇

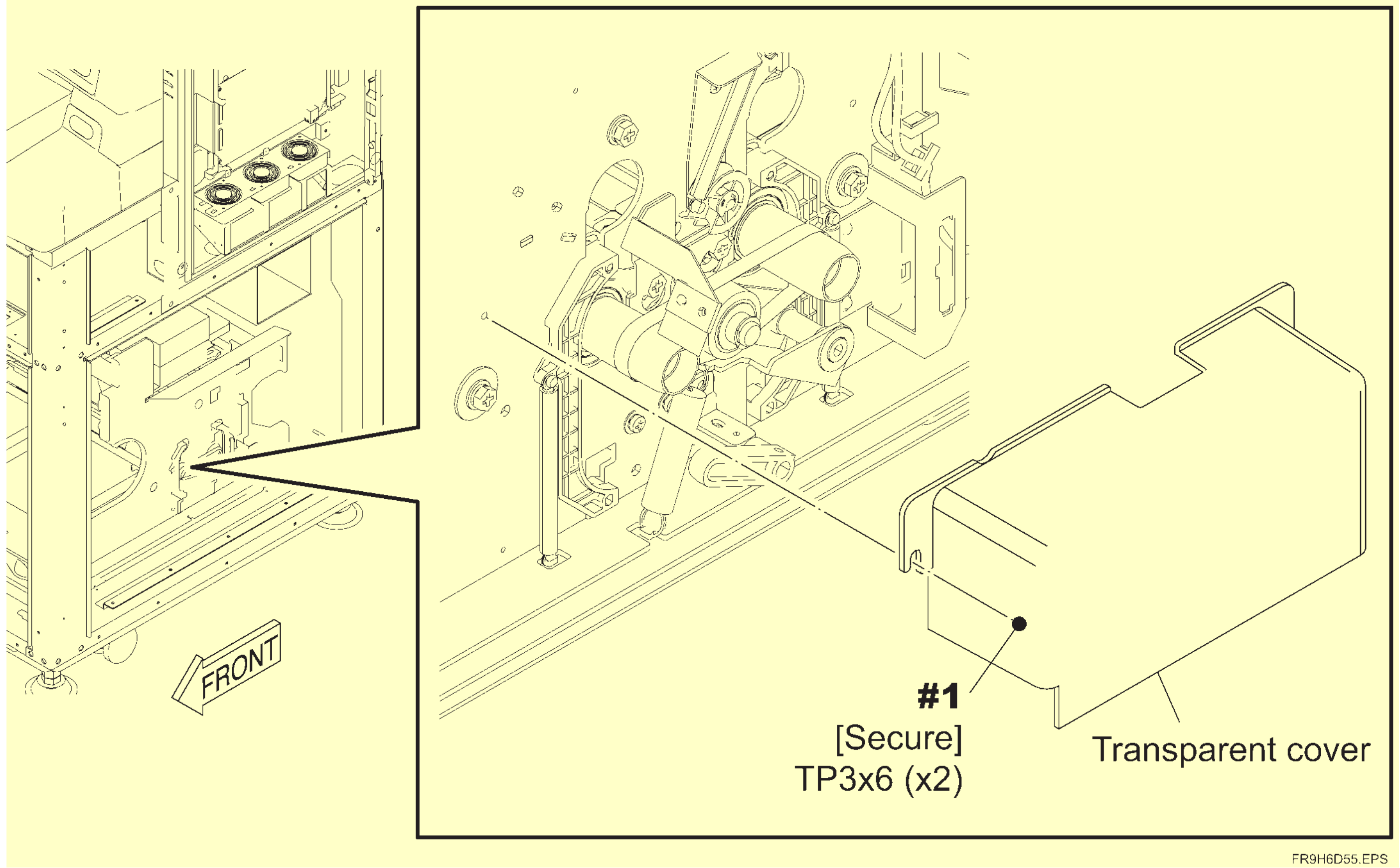
The SUS belt and the tension coil spring are attached in the positional relation shown below.


SUS belt
Tensioner
Tension coil spring
(L=42mm)
FR9H6D67.EPS

3. **Reinstall the shock-absorbing rubber assemblies.**


A
B
FRONT
DETAIL A
#2
[Secure]
TP3x6 (x2)
FRONT
#1
[Secure]
TP3x6 (x2)
Shock-absorbing
rubber assembly
DETAIL B
#4
[Secure]
TP3x6 (x2)
FRONT
Shock-absorbing
rubber assembly
#3
[Secure]
TP3x6 (x2)
FR9H6D59.EPS

4. **Reinstall the transparent cover.**

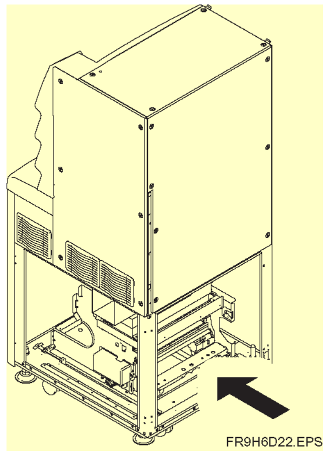

FRONT
#1
[Secure]
TP3x6 (x2)
Transparent cover
FR9H6D55.EPS

2Y ☞ {PM:11.10}

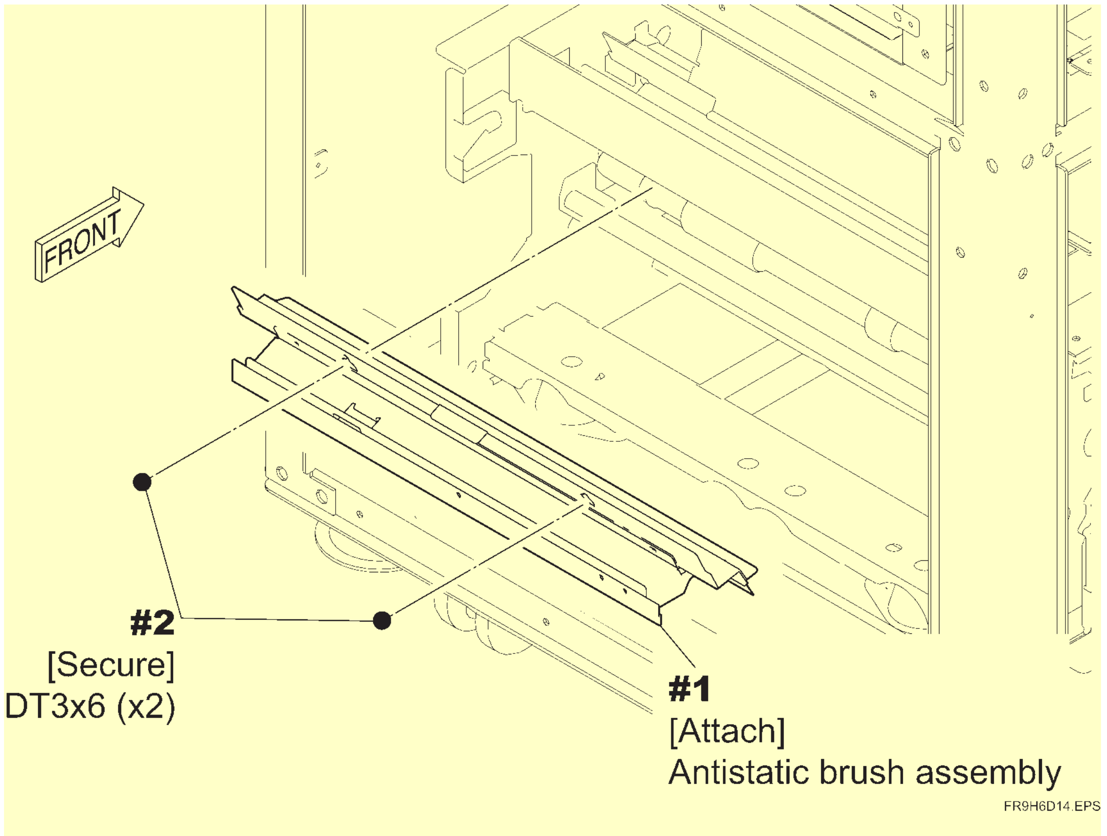
11.10 Reinstalling the Side-Positioning Conveyor Unit

2Y **3Y**

1. **Carry out the operations in the steps 2 to 5 from the direction indicated by the arrow in the figure below.**


FR9H6D22.EPS

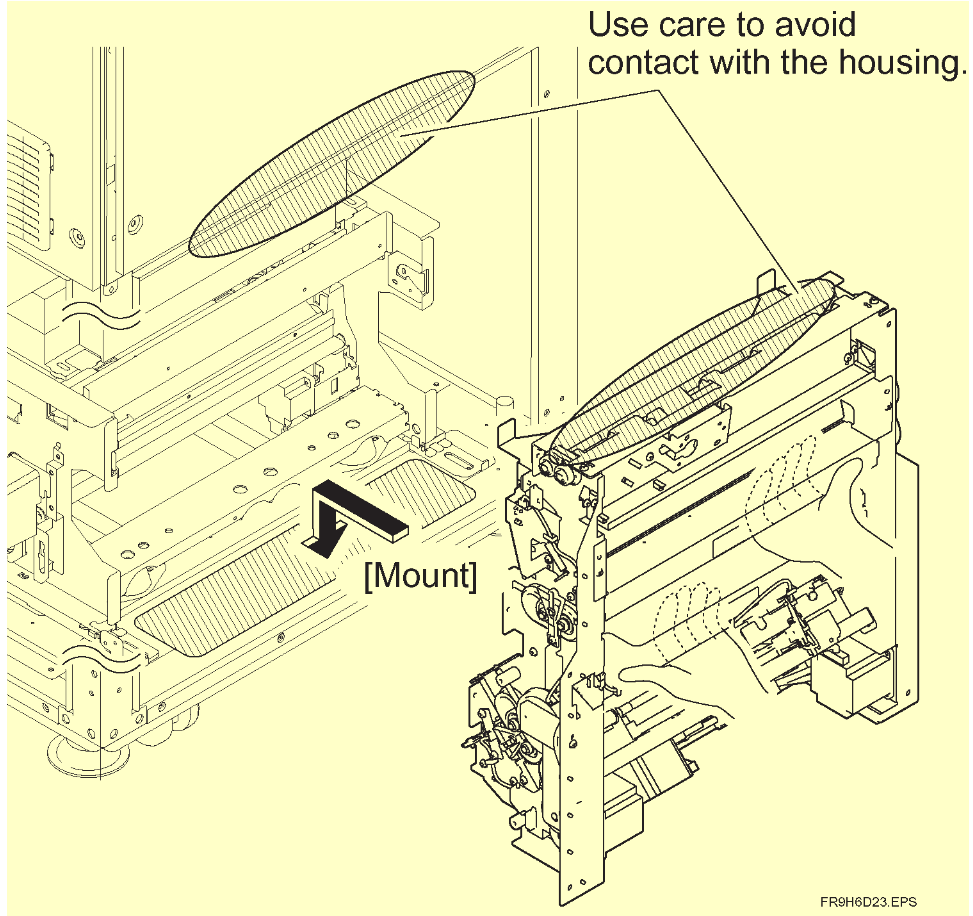
2. **Reinstall the antistatic brush assembly.**


FRONT
#2
[Secure]
DT3x6 (x2)
#1
[Attach]
Antistatic brush assembly
FR9H6D14.EPS

3. **Mount the side-positioning conveyor unit onto the housing.**

◆ ***NOTE*** ◆

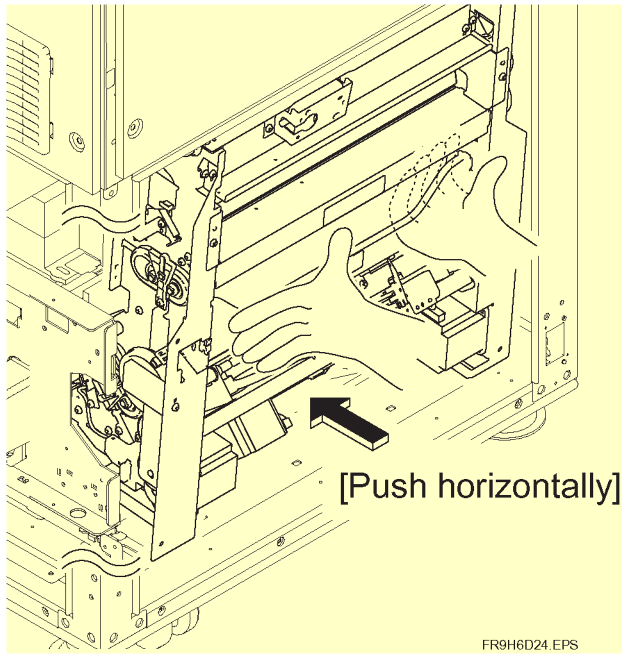
Exercise care not to bring the upper portion of the side-positioning conveyor unit into contact with the ceiling of the housing (shadowed portion in the figure) when mounting the side-positioning conveyor unit onto the housing. The guide of the side-positioning conveyor unit might possibly deform or get damaged.


Use care to avoid
contact with the housing.
[Mount]
FR9H6D23.EPS

4. Push in the lower portion of the side-positioning conveyor unit horizontally.

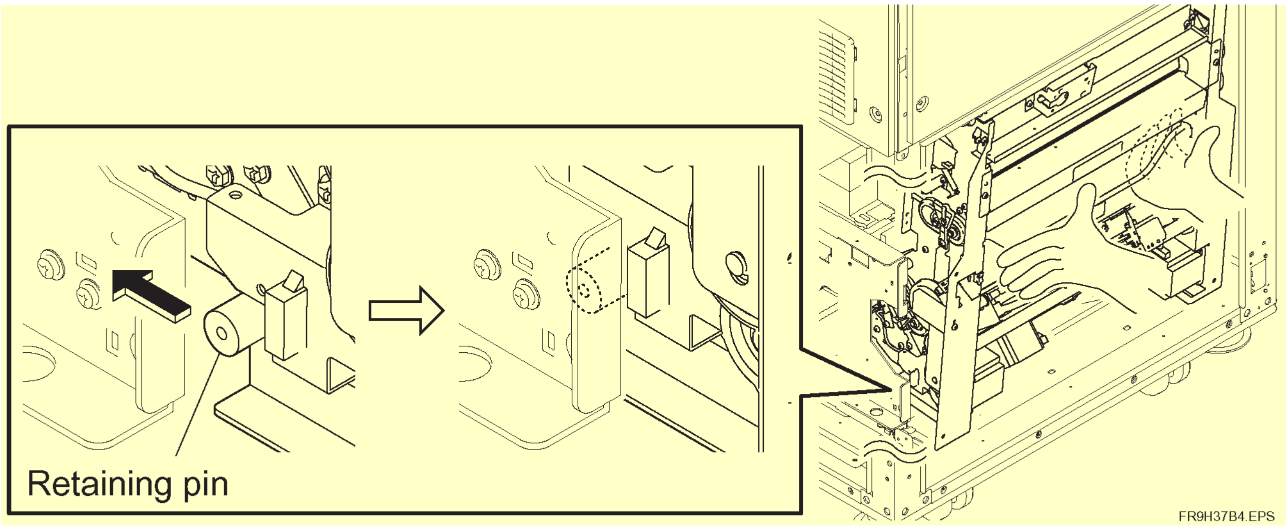
◆ NOTE ◆

Push the side-positioning conveyor unit horizontally without lifting it. Otherwise, the upper portion of the side-positioning conveyor unit might come into contact with the ceiling of the housing, resulting in deformation or damage of the guide of the side-positioning conveyor unit.


[Push horizontally]
FR9H6D24.EPS

◇ REFERENCE ◇

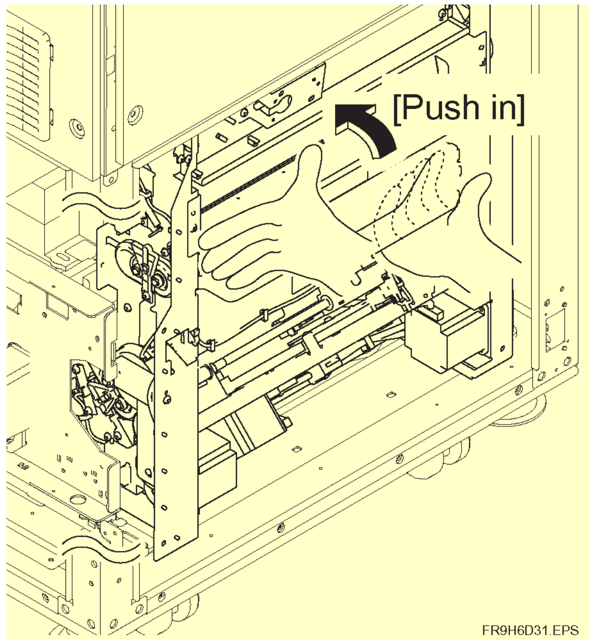
When the lower portion of the side-positioning conveyor unit is pushed in, the pin (lower) for retaining with the subscanning unit is inserted into its retained position.


Retaining pin
FR9H37B4.EPS

5. Push in the upper portion of the side-positioning conveyor unit horizontally.

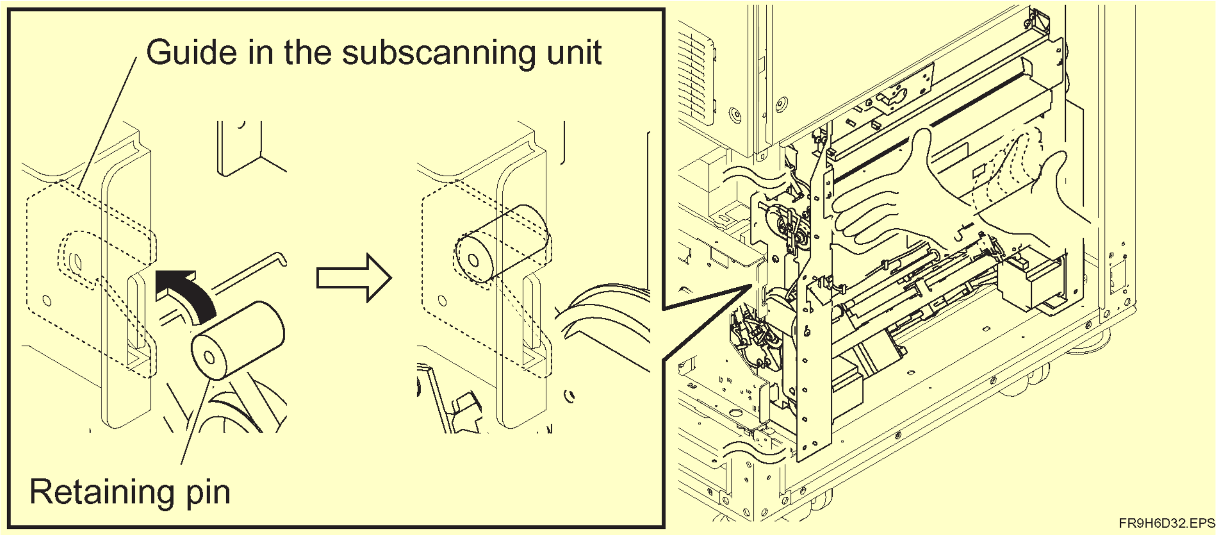
◆ NOTE ◆

Push the side-positioning conveyor unit horizontally without lifting it. Otherwise, the upper portion of the side-positioning conveyor unit might come into contact with the ceiling of the housing, resulting in deformation or damage of the guide of the side-positioning conveyor unit.

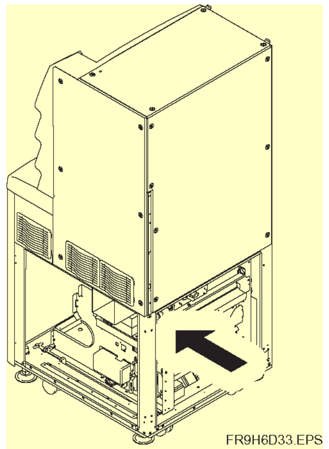

[Push in]
FR9H6D31.EPS

◇ REFERENCE ◇

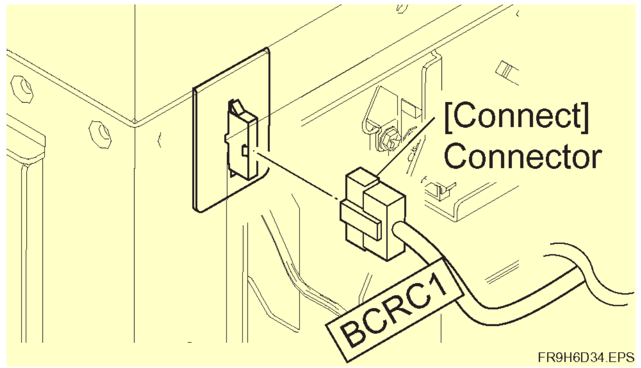
When the upper portion of the side-positioning conveyor unit is pushed in, the pin (upper) for retaining with the subscanning unit gets caught with the guide inside the subscanning unit, to have the side-positioning conveyor unit retained.


Guide in the subscanning unit
Retaining pin
FR9H6D32.EPS

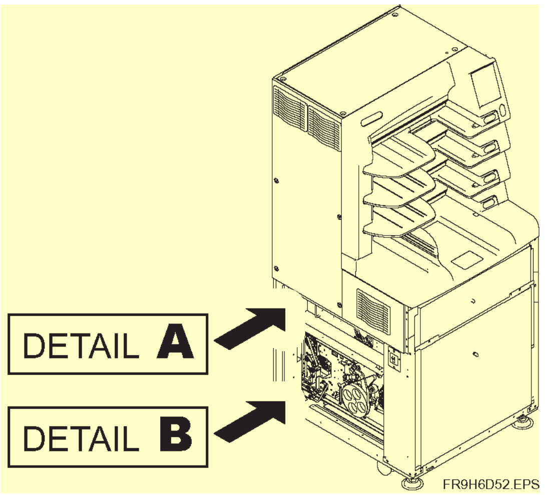
6. **Carry out the operations in the step 7 from the direction indicated by the arrow in the figure below.**


FR9H6D33.EPS

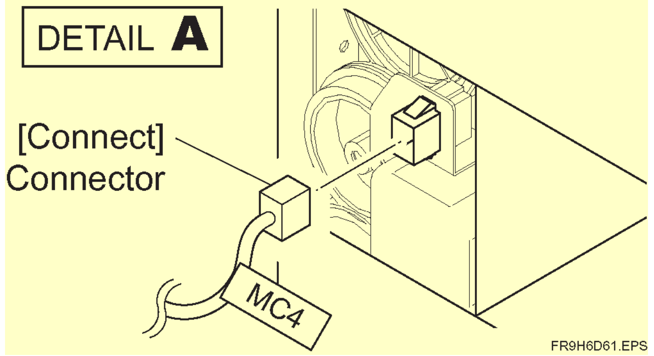
7. **Connect the connector.**


[Connect]
Connector
BCRC1
FR9H6D34.EPS

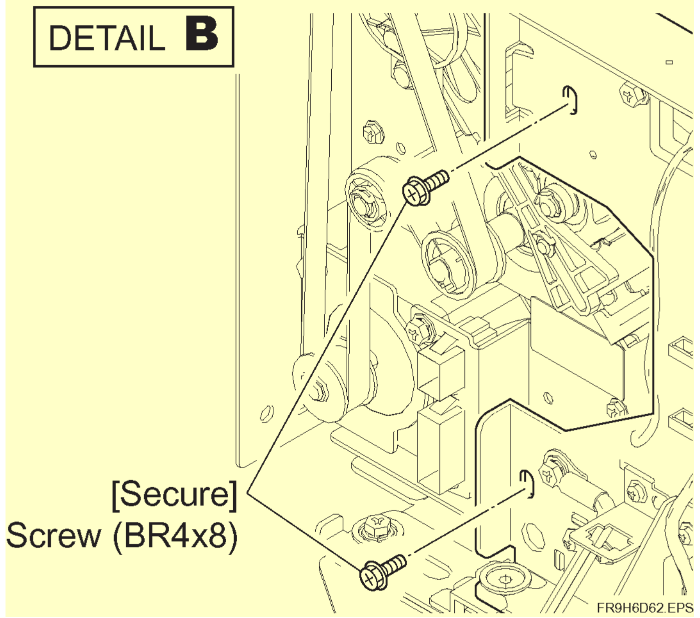
8. **Carry out the operations in the steps 9 to 11 from the direction indicated by the arrow in the figure below.**


DETAIL A
DETAIL B
FR9H6D52.EPS

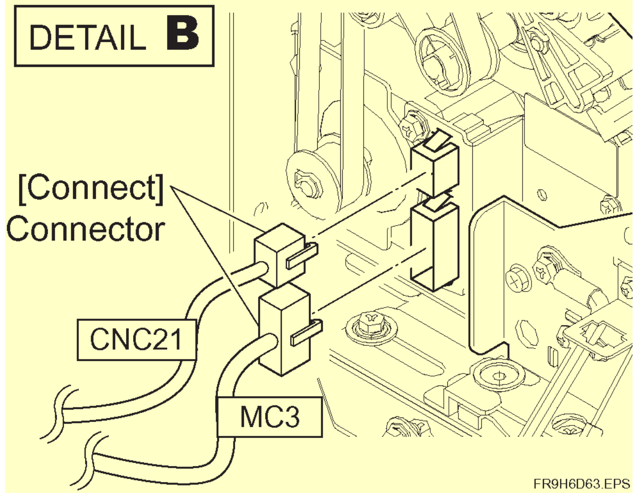
9. **Connect the connector.**


DETAIL A
[Connect]
Connector
MC4
FR9H6D61.EPS

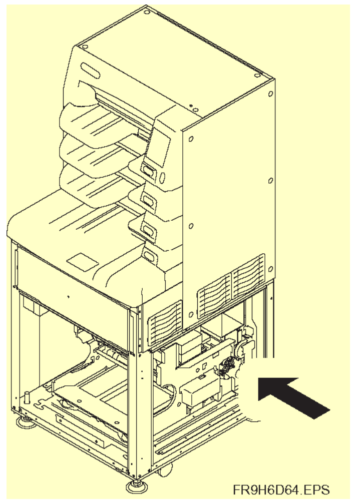
10. **Attach the screw.**


DETAIL B
[Secure]
Screw (BR4x8)
FR9H6D62.EPS

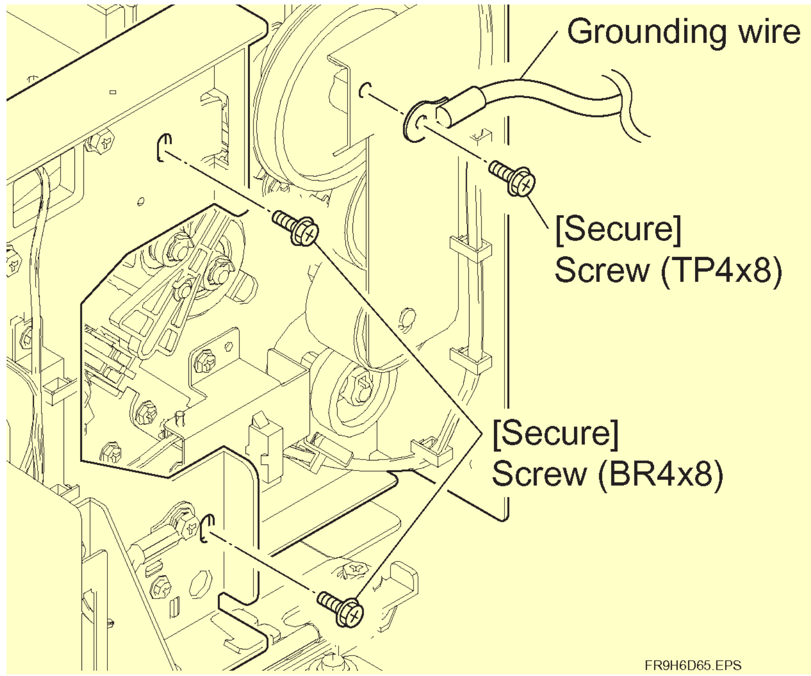
11. **Connect the connector.**


DETAIL B
[Connect]
Connector
CNC21
MC3
FR9H6D63.EPS

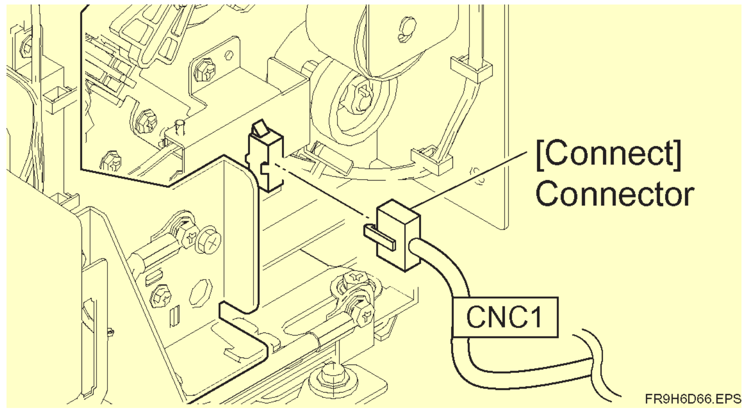
12. **Carry out the operations in the steps 13 and 14 from the direction indicated by the arrow in the figure below.**


FR9H6D64.EPS

13. **Attach the screws.**


Grounding wire
[Secure]
Screw (TP4x8)
[Secure]
Screw (BR4x8)
FR9H6D65.EPS

14. **Connect the connector.**


[Connect]
Connector
CNC1
FR9H6D66.EPS

15. **Check to ensure that the grounding cable and the screws once removed are snugly fastened.**

2Y ☞ {PM:12.1}　　**3Y** ☞ {PM:13.1}

12. Light-Collecting Guide

12.1 Cleaning the Upper Light-Collecting Guide

2Y

⚠ **CAUTIONS**

- *Never touch the light-receiving face of the light-collecting unit even when you are wearing gloves.*
- *Do not wipe the light-collecting guide with a dry cloth. If so, the light-collecting guide may be scratched or otherwise damaged.*
- *If the lens cleaning paper becomes soiled, replace it with a new one.*
- *Wipe the light-collecting surface of the light-collecting guide until the lens cleaning paper becomes no longer soiled.*
- *Wipe the light-collecting guide assembly in one direction at a constant speed.*
- *Do not wipe the photomultiplier attachment face.*

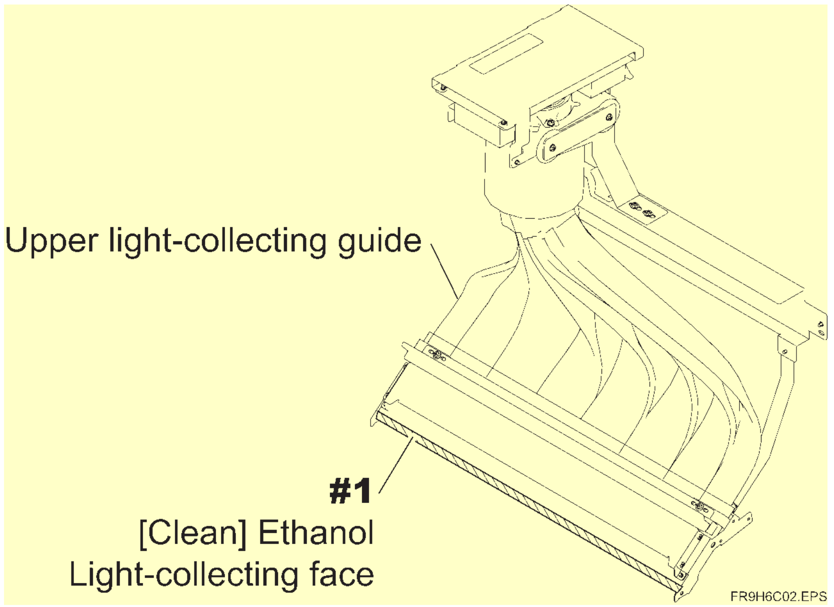
◆ *INSTRUCTION* ◆

Wear gloves when servicing the light-collecting unit.

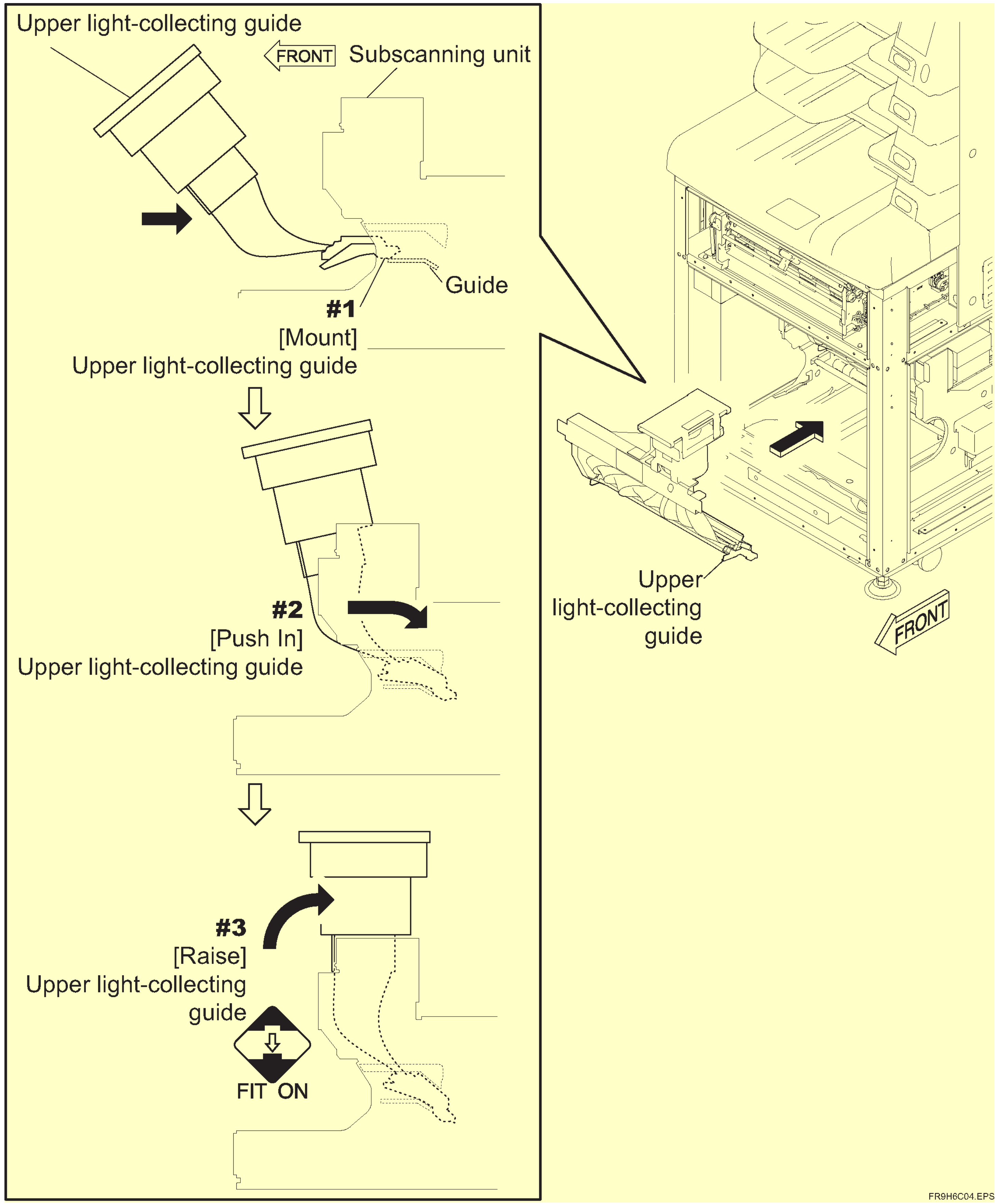
1. **Clean the light-collecting face of the upper light-collecting guide by use of ethanol.**

◇ *REFERENCE* ◇

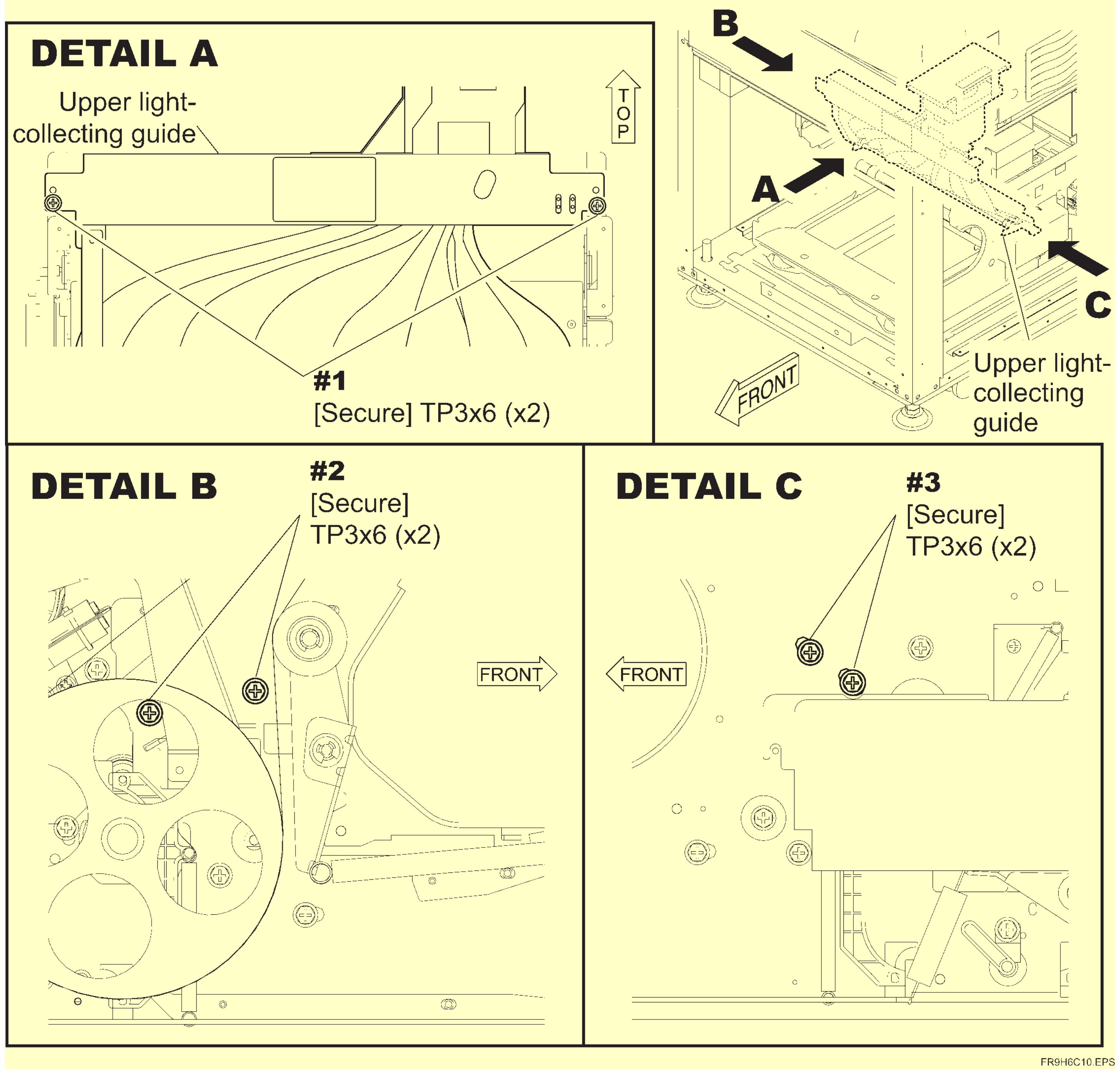
To clean the light-collecting guide, two sheets of lens cleaning paper should be folded in four and then moistened with ethanol.


Upper light-collecting guide
#1
[Clean] Ethanol
Light-collecting face
FR9H6C02.EPS

2. **Reinstall the upper light-collecting guide.**


Upper light-collecting guide
FRONT
Subscanning unit
Guide
#1
[Mount]
Upper light-collecting guide
#2
[Push In]
Upper light-collecting guide
#3
[Raise]
Upper light-collecting guide
FIT ON
Upper light-collecting guide
FRONT
FR9H6C04.EPS

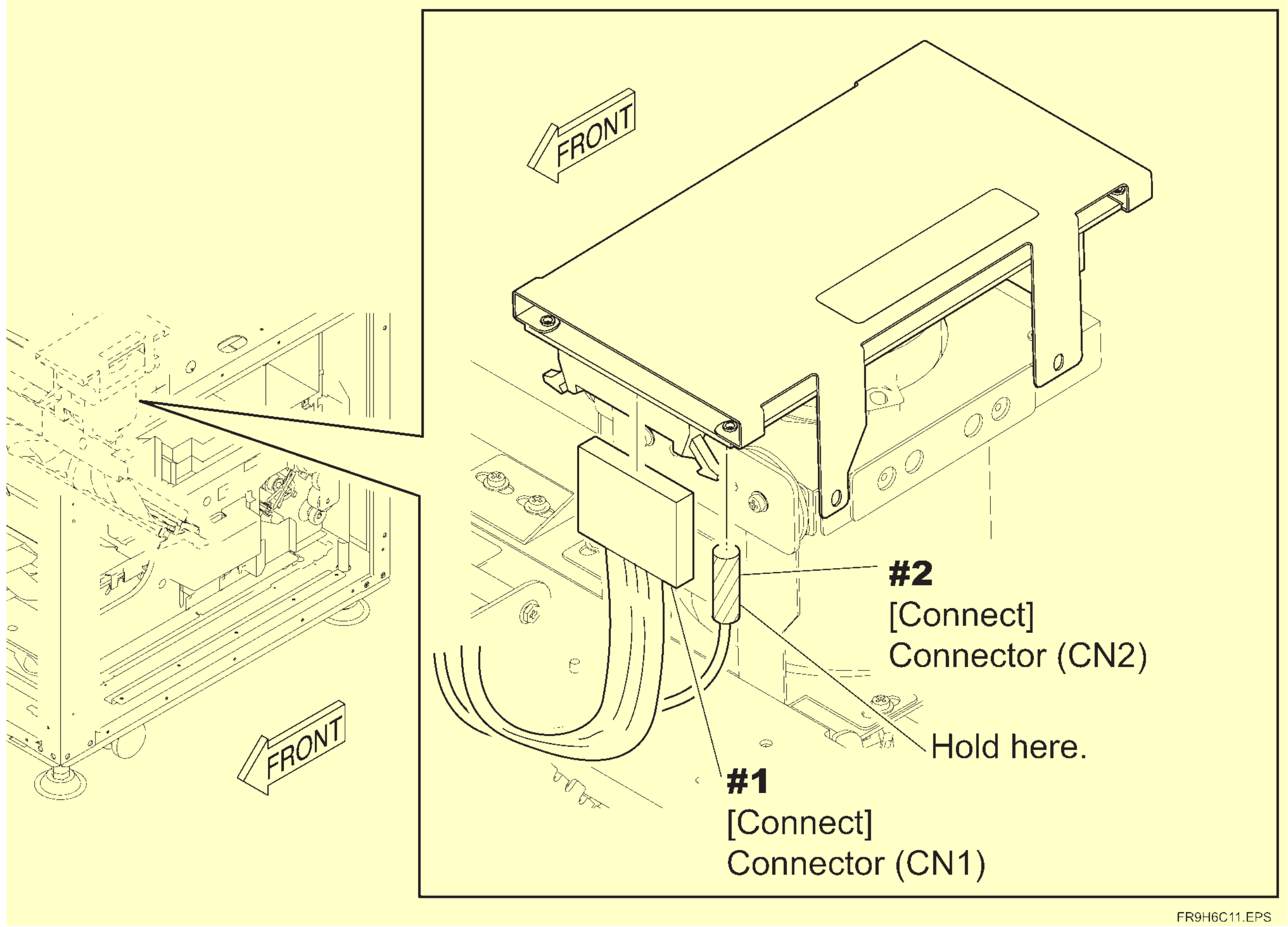
3. **Secure the upper light-collecting guide in place.**


DETAIL A
Upper light-collecting guide
TOP
#1
[Secure] TP3x6 (x2)
B
A
C
FRONT
Upper light-collecting guide
DETAIL B
#2
[Secure] TP3x6 (x2)
FRONT
DETAIL C
#3
[Secure] TP3x6 (x2)
FRONT
FR9H6C10.EPS

4. **Connect the connectors.**

◆ ***NOTE*** ◆

The CN2 should be connected at right angles to the board. If not, the connector of the board might be damaged.


FRONT
FRONT
#2
[Connect] Connector (CN2)
Hold here.
#1
[Connect] Connector (CN1)
FR9H6C11.EPS

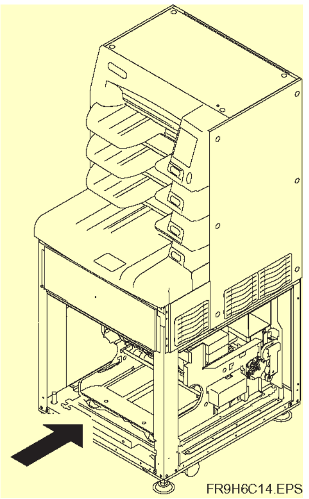
5. **Check to ensure that the screws once removed are snugly retained.**

2Y ☞ {PM:12.2}

12.2 Reinstalling the Post-Reading Conveyor Unit

2Y

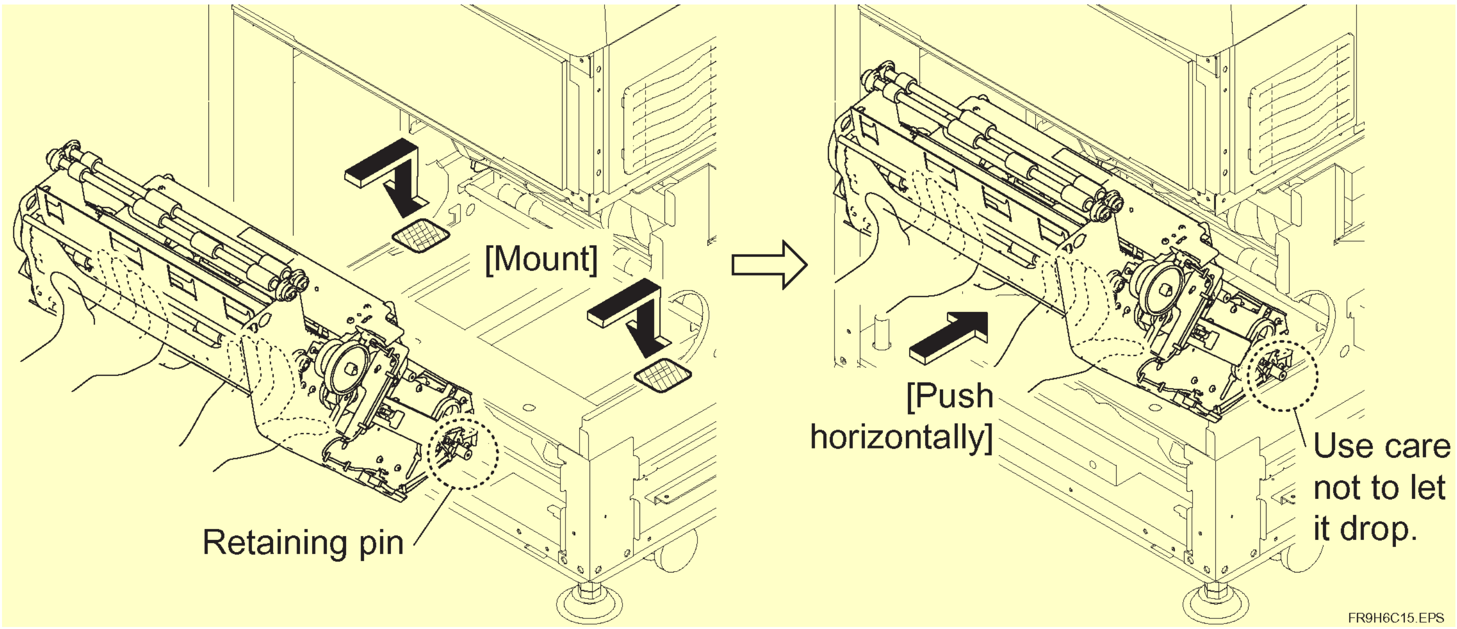
1. **Carry out the operations in the steps 2 and 3 from the direction indicated by the arrow in the figure below.**


FR9H6C14.EPS

2. **Mount the pin for retaining the post-reading conveyor unit on the rail inside the subscanning unit, and then push it horizontally.**

◆ *NOTE* ◆

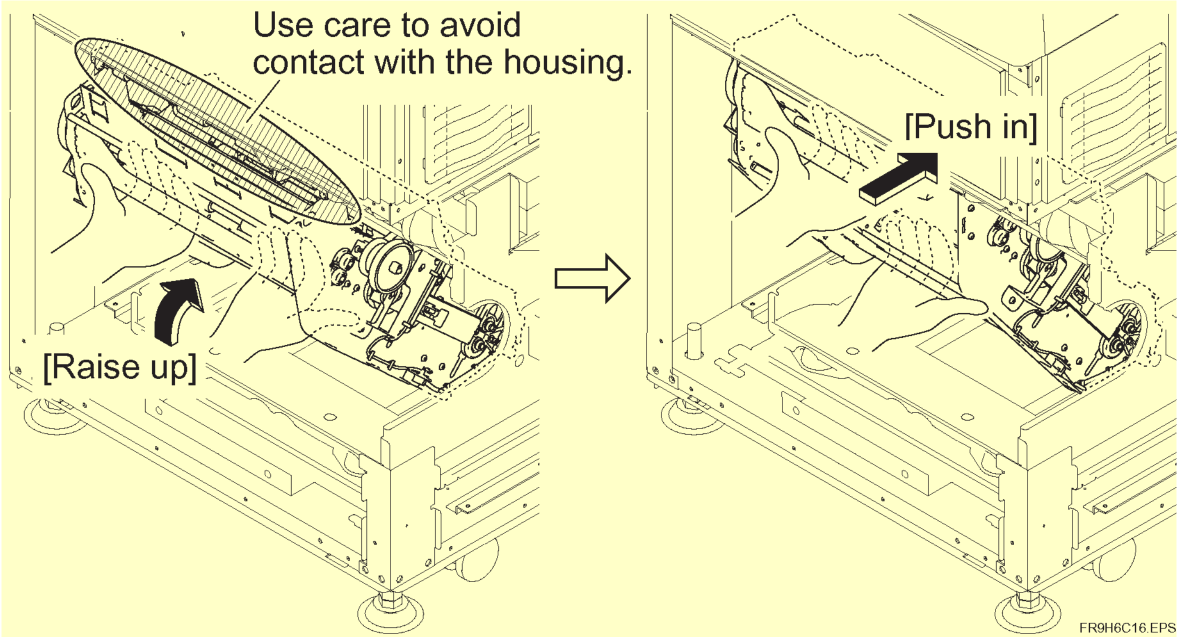
Exercise care not to allow the retaining pin for the post-reading conveyor unit to come off from the rail in the subscanning unit when pushing in the post-reading conveyor unit.


[Mount]
Retaining pin
[Push horizontally]
Use care not to let it drop.
FR9H6C15.EPS

3. **Raise up the upper portion of the post-reading conveyor unit, and push it into the subscanning unit.**

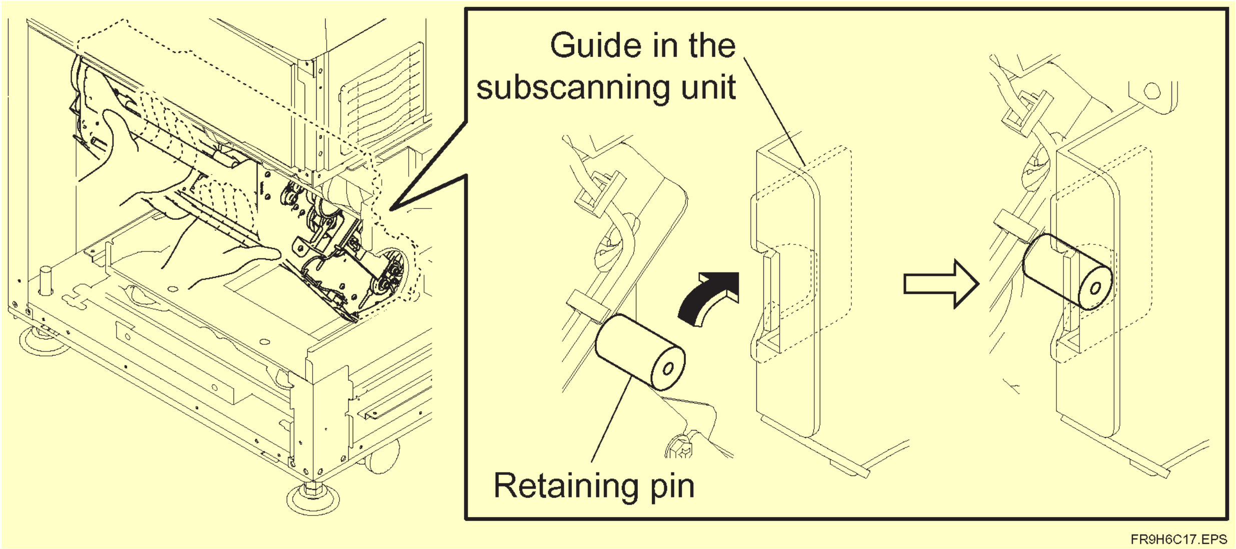
◆ *NOTES* ◆

- *Exercise care not to bring the upper portion of the post-reading conveyor unit into contact with the ceiling of the housing (shadowed portion in the figure) when raising up the pos-treading conveyor unit. The guide of the post-reading conveyor unit might possibly deform or get damaged.*
- *Push in the post-reading conveyor unit without lifting it. Otherwise, the upper portion of the post-reading conveyor unit might come into contact with the ceiling of the housing, resulting in the deformation or damage of the guide of the post-reading conveyor unit.*

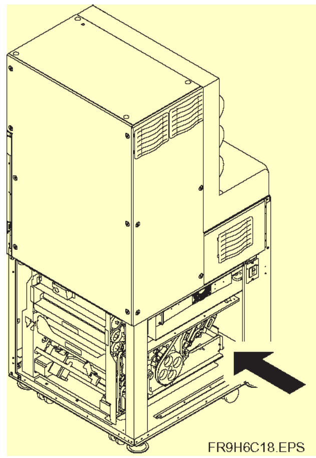

Use care to avoid contact with the housing.
[Raise up]
[Push in]
FR9H6C16.EPS

◇ *REFERENCE* ◇

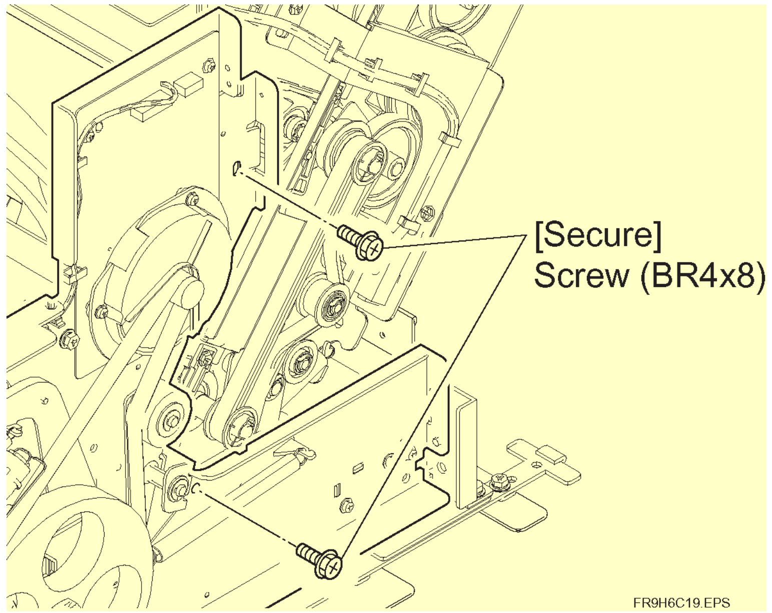
When the upper portion of the post-reading conveyor unit is pushed in, the pin for retaining with the subscanning unit gets caught with the guide inside the subscanning unit, to have the post-reading conveyor unit retained.


Guide in the subscanning unit
Retaining pin
FR9H6C17.EPS

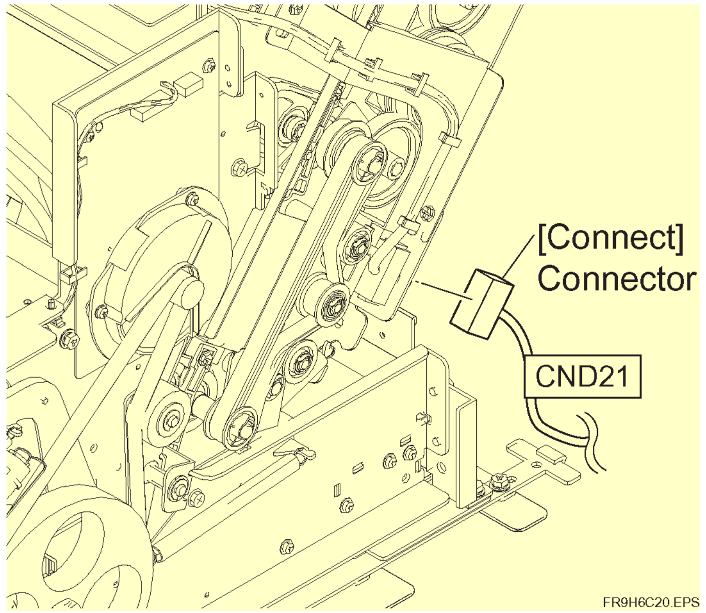
4. **Carry out the operations in the steps 5 and 6 from the direction indicated by the arrow in the figure below.**


FR9H6C18.EPS

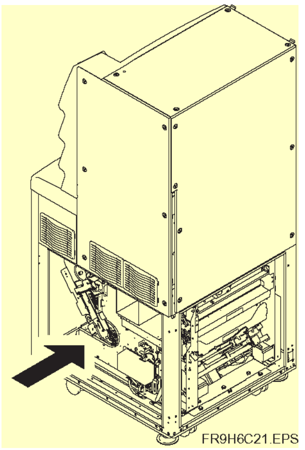
5. **Secure the screws.**


[Secure]
Screw (BR4x8)
FR9H6C19.EPS

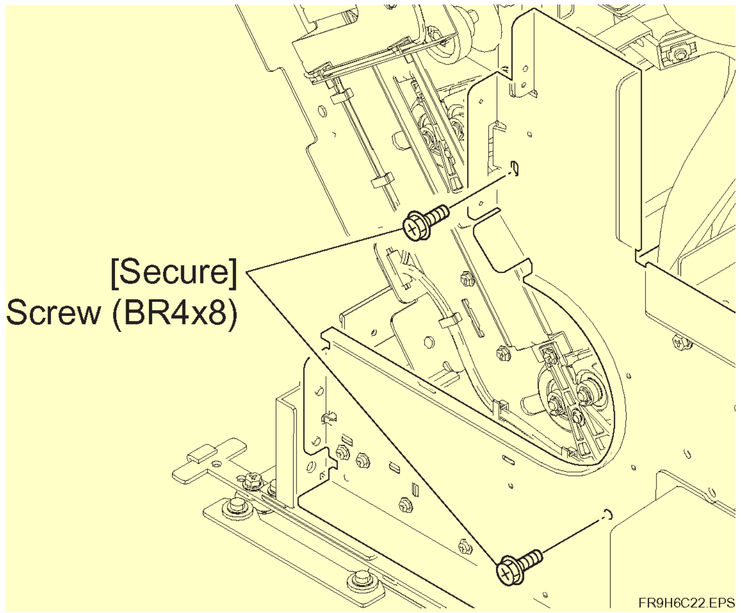
6. **Connect the connector.**


[Connect]
Connector
CND21
FR9H6C20.EPS

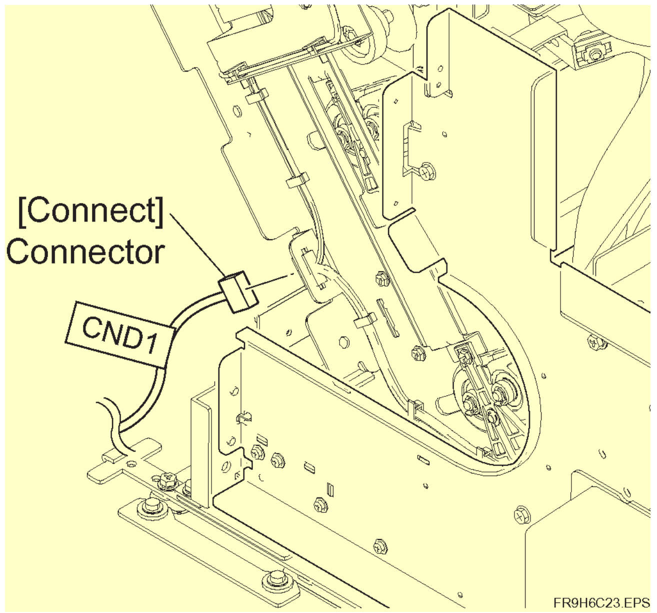
7. **Carry out the operations in the steps 8 and 9 from the direction indicated by the arrow in the figure below.**


FR9H6C21.EPS

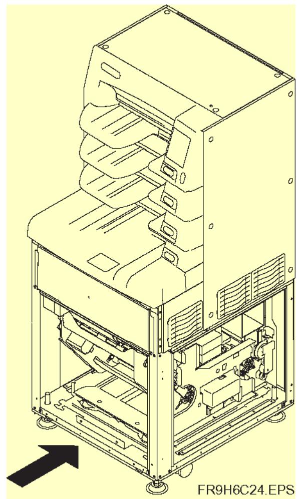
8. **Secure the screws.**


[Secure]
Screw (BR4x8)
FR9H6C22.EPS

9. **Connect the connector.**


[Connect]
Connector
CND1
FR9H6C23.EPS

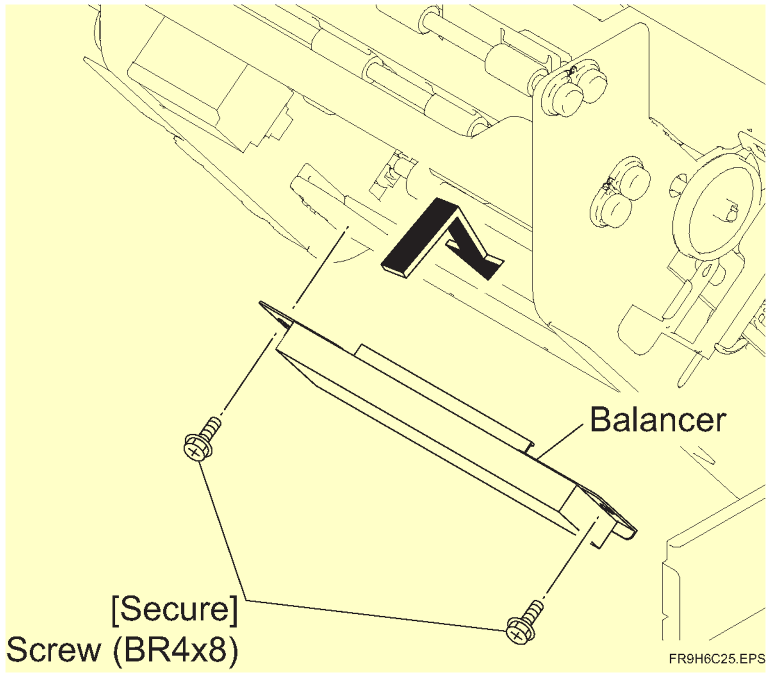
10. **Carry out the operations in the steps 11 and 12 from the direction indicated by the arrow in the figure below.**


FR9H6C24.EPS

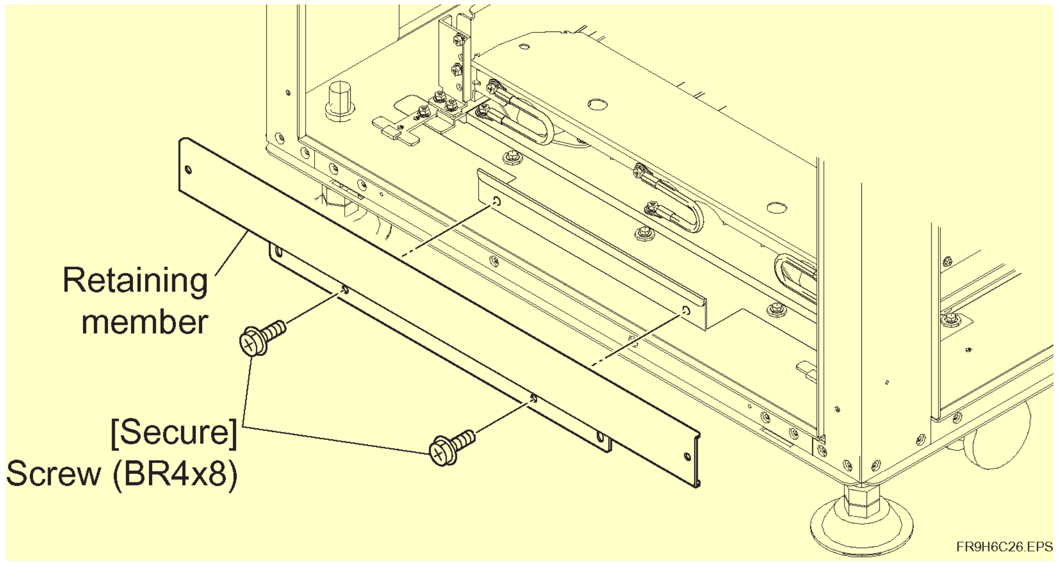
11. **Reinstall the balancer.**

◆ NOTE ◆

Hold the balancer in both hands for installation. Because the balancer weighs about 6 kg, your wrist may be hurt if you hold it with one hand.


Balancer
[Secure]
Screw (BR4x8)
FR9H6C25.EPS

12. **Reinstall the retaining member.**


Retaining
member
[Secure]
Screw (BR4x8)
FR9H6C26.EPS

13. **Check to ensure that the screws once removed are snugly retained.**

2Y ☞ {PM:13.1}

12.3 Nothing

13. Erasure Conveyor Unit

13.1 Removing the Lamp Assembly

#20001 or later: 1Y 3Y ☞ {PM:14.1} 2Y ☞ {PM:13.2}

#50001 or later: 1Y ☞ {PM:14.4} 2Y ☞ {PM:13.2} 3Y ☞ {PM:14.5}

⚠ ***CAUTION***

Do not touch the surface (filter face)of the lamp assembly immediately after the operation is stopped. Since it remains at high temperatures, you may suffer burns.

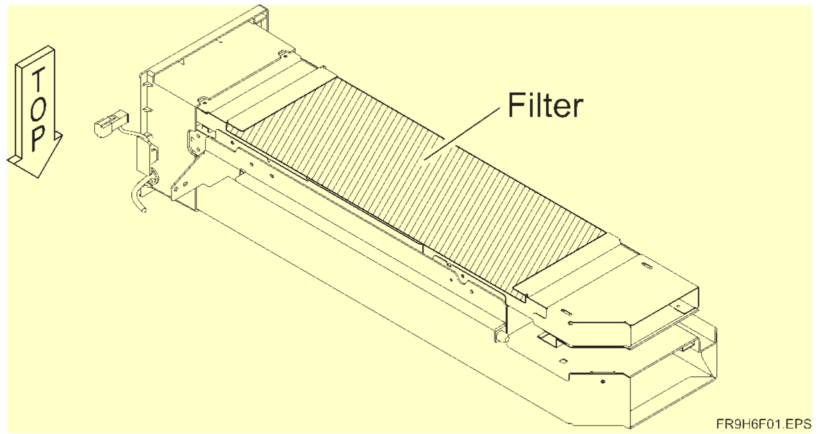
◆ ***NOTE*** ◆

The shapes of lamp assembly differ between #20001 or later and #50001 or later; however, removal procedures are same.

1. Remove the lamp assembly.

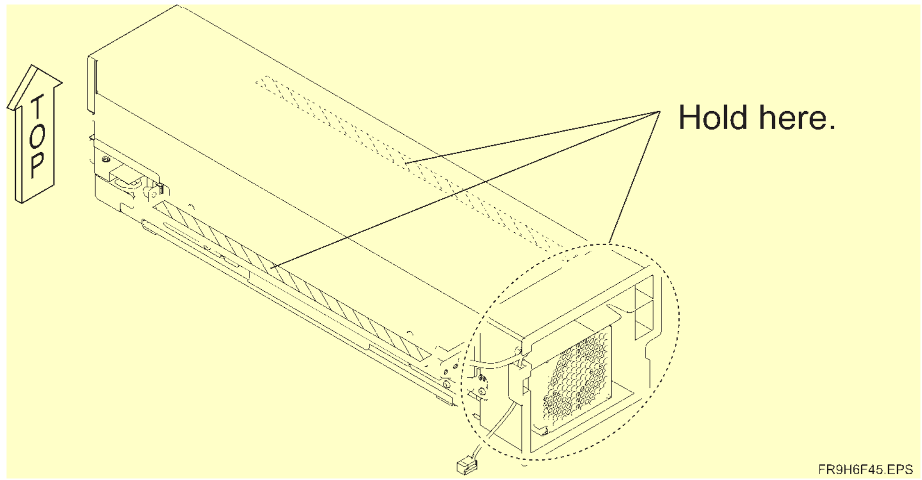
◆ ***NOTES*** ◆

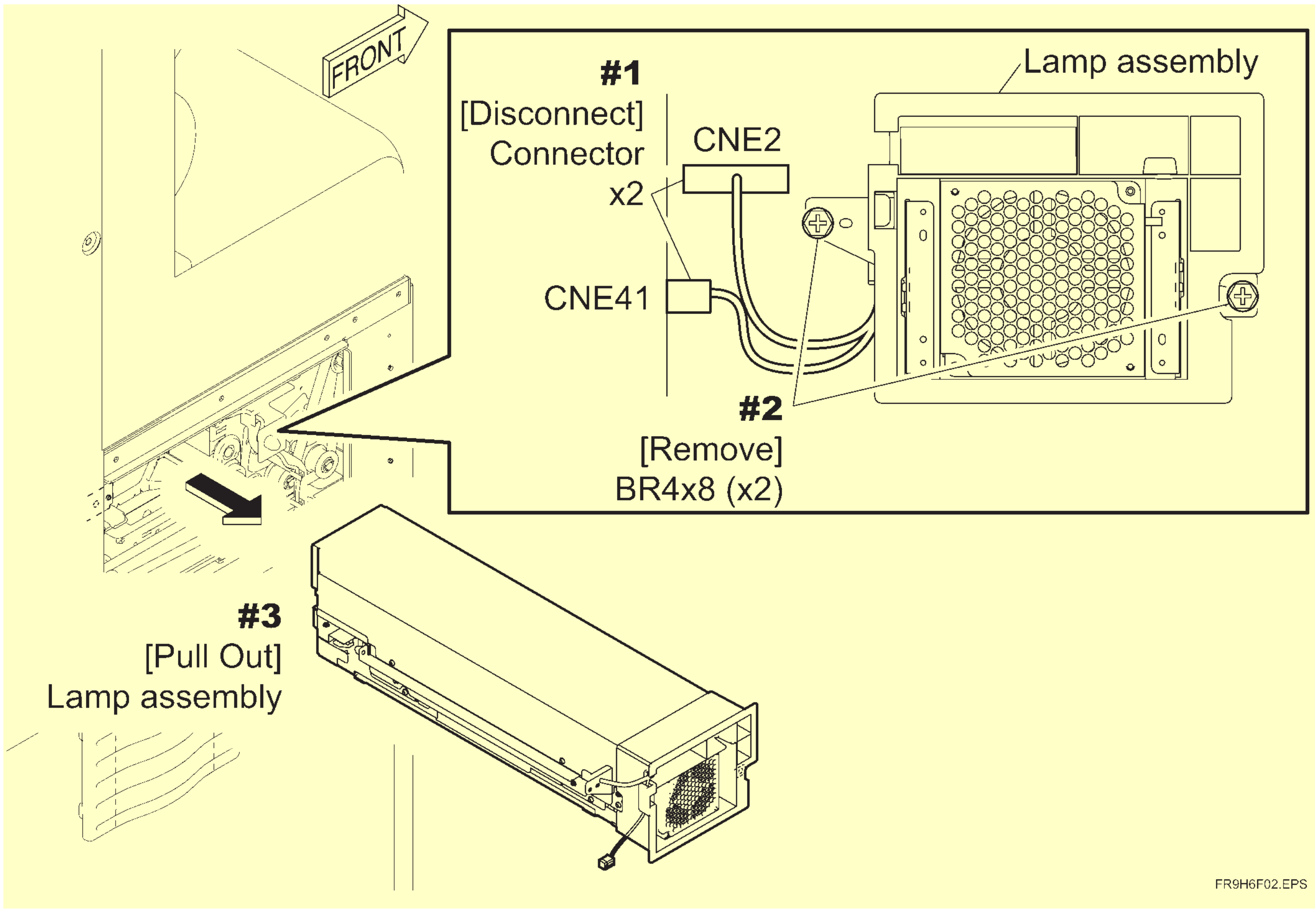
- *When handling the lamp assembly, wear gloves so that the filter located on the bottom face of the lamp assembly is not soiled.*
- *Do not grasp the filter face when holding the lamp assembly. Otherwise, the shock absorbing member might be peeled off.*
- *Place the lamp assembly with the filter face up. If the lamp is placed with the filter face down,the filter may be damaged.*


TOP
Filter
FR9H6F01.EPS

◆ ***INSTRUCTION*** ◆

When handling the lamp assembly, take hold of the portions illustrated below.

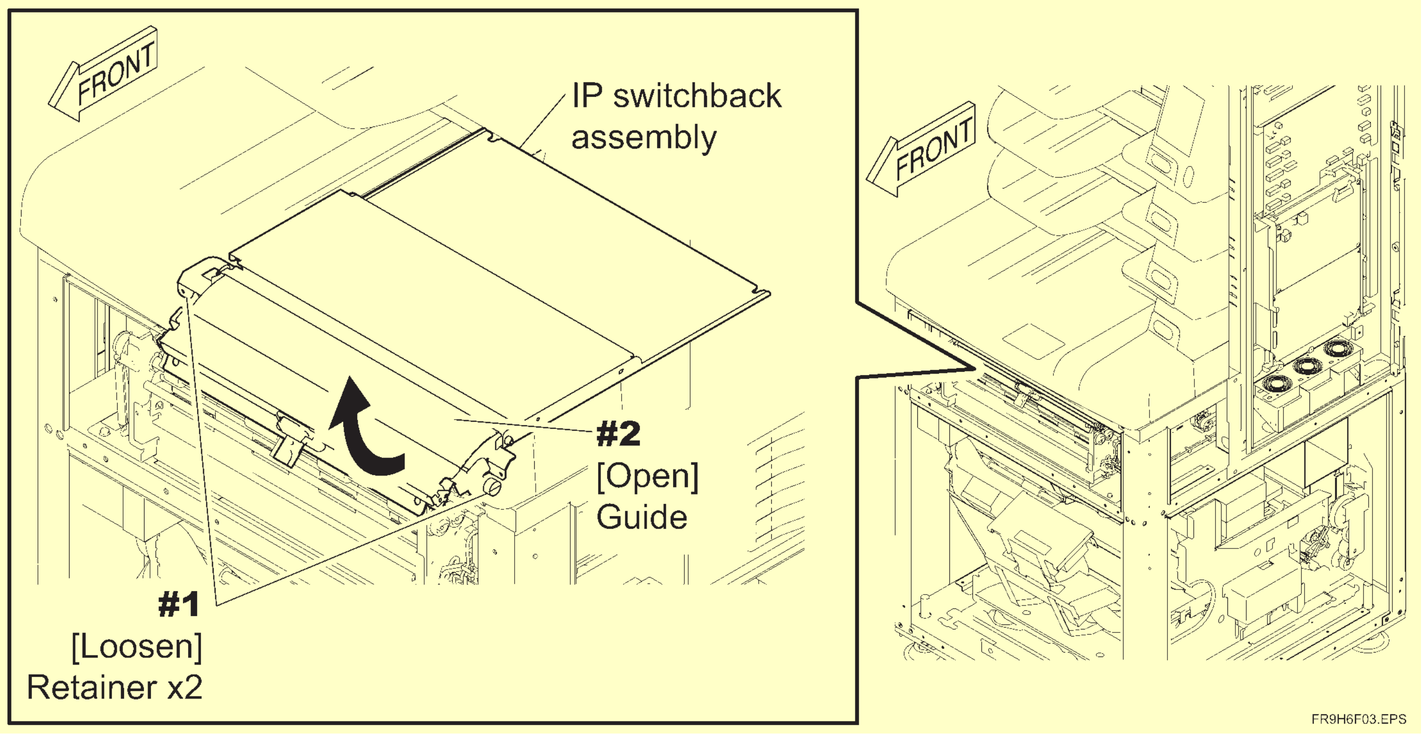

TOP
Hold here.
FR9H6F45.EPS


FRONT
#1
[Disconnect]
Connector
x2
CNE2
CNE41
Lamp assembly
#2
[Remove]
BR4x8 (x2)
#3
[Pull Out]
Lamp assembly
FR9H6F02.EPS

13.2 Removing the Erasure Conveyor Unit

2Y ☞ {PM:13.3}

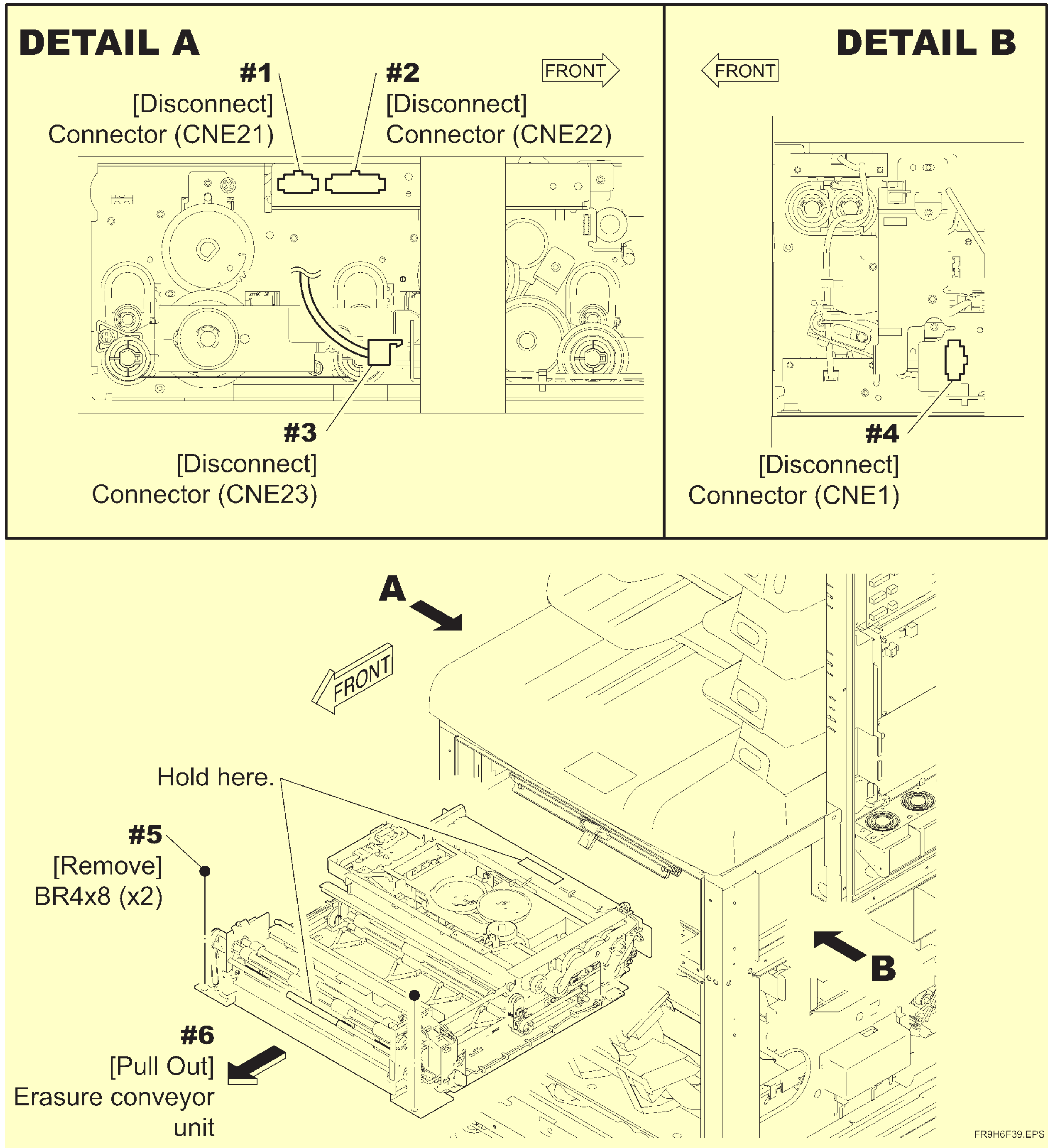
1. **Open the guide.**


FRONT
IP switchback assembly
#2
[Open]
Guide
#1
[Loosen]
Retainer x2
FRONT
FR9H6F03.EPS

2. **Remove the erasure conveyor unit.**

◆ ***NOTE*** ◆

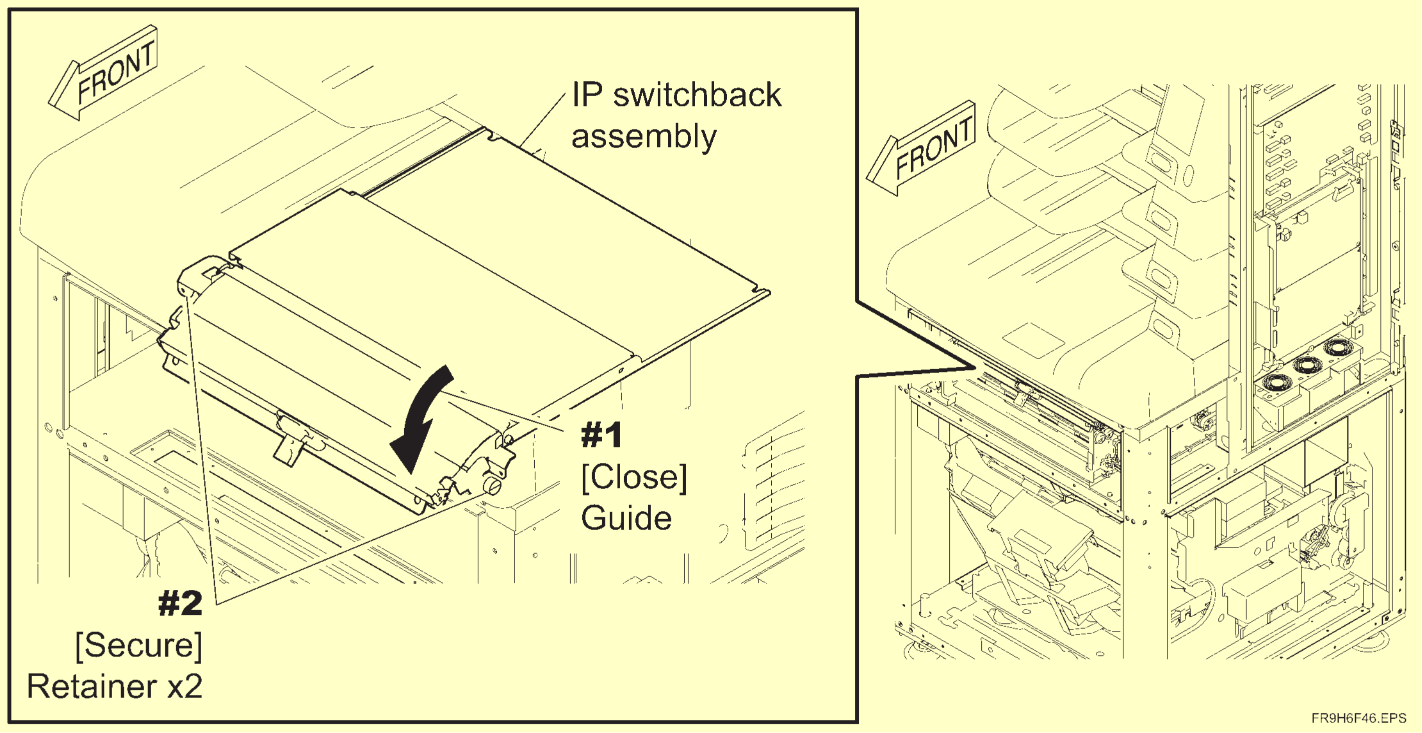
When puling out and transporting the erasure conveyor unit, take hold of the designated portions to perform the procedures. If you grasp the rollers, guides, or other portions, they may be deformed.


DETAIL A
#1
[Disconnect]
Connector (CNE21)
#2
[Disconnect]
Connector (CNE22)
FRONT
#3
[Disconnect]
Connector (CNE23)
DETAIL B
FRONT
#4
[Disconnect]
Connector (CNE1)
A
FRONT
Hold here.
#5
[Remove]
BR4x8 (x2)
#6
[Pull Out]
Erasure conveyor unit
B
FR9H6F39.EPS

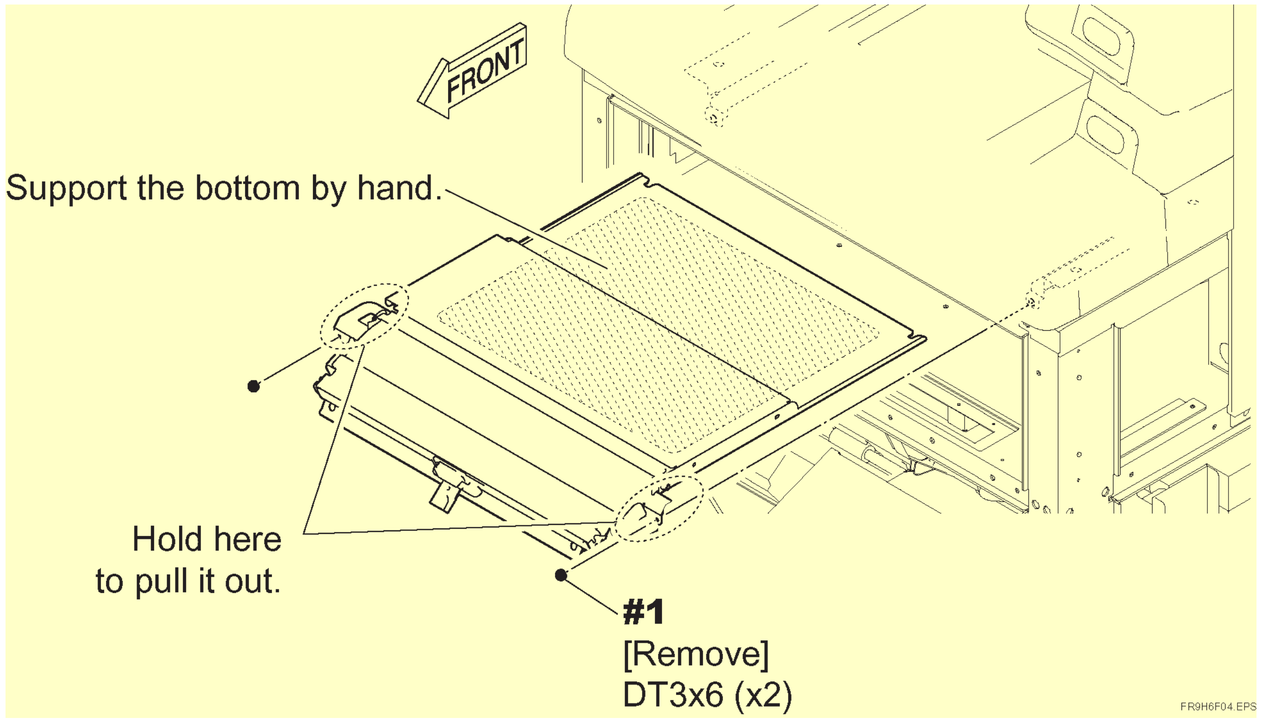
13.3 Cleaning the IP Switchback Assembly

2Y ☞ {PM:13.4}

1. **Close the guide.**


FRONT
IP switchback assembly
#1
[Close]
Guide
#2
[Secure]
Retainer x2
FRONT
FR9H6F46.EPS

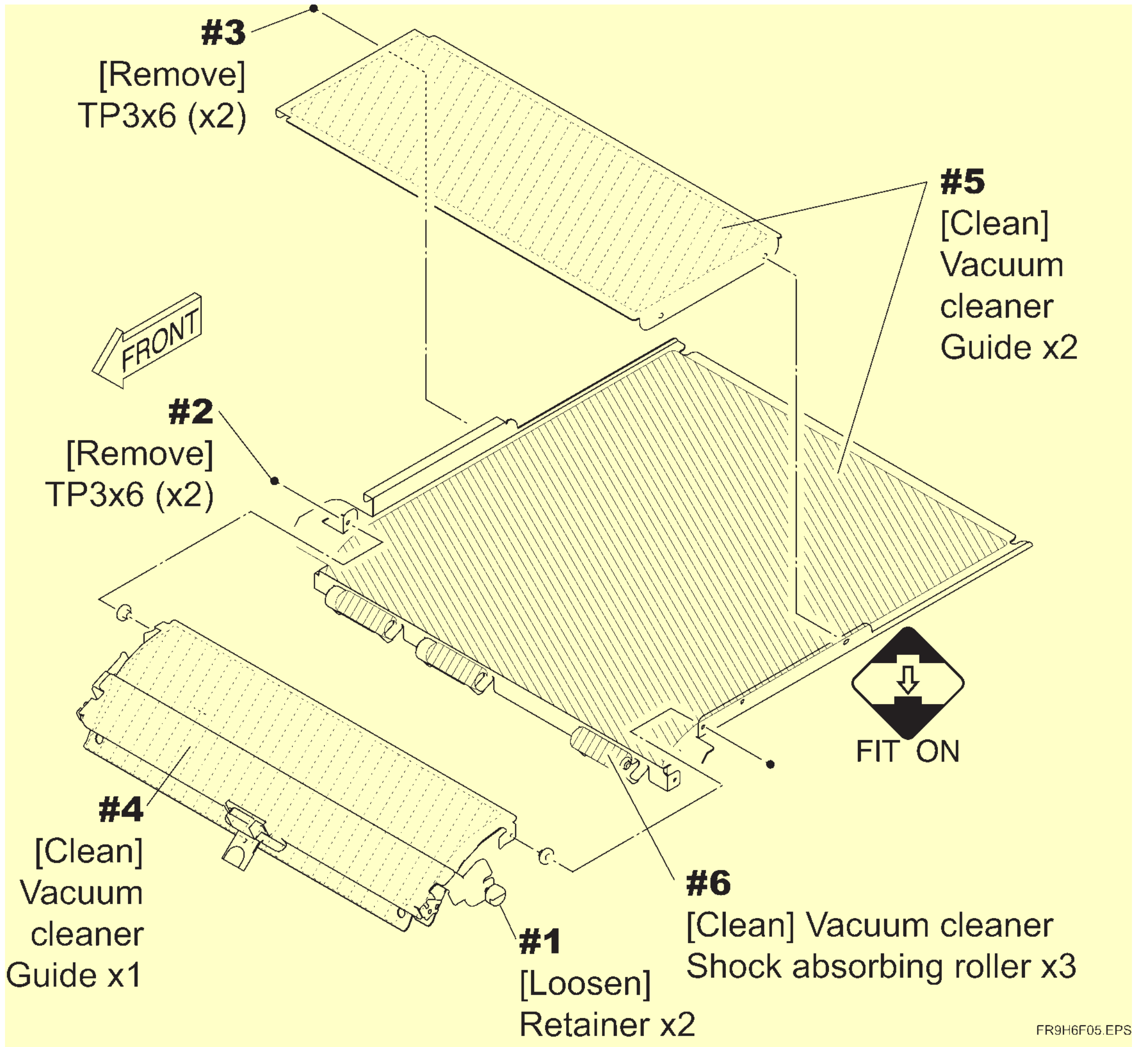
2. **Remove the IP switchback assembly.**


FRONT
Support the bottom by hand.
Hold here
to pull it out.
#1
[Remove]
DT3x6 (x2)
FR9H6F04.EPS

3. **Clean the guides and shock absorbing rollers by use of a vacuum cleaner.**

◆ NOTE ◆

When disassembling the IP switchback assembly, do not apply excessive force onto the guides. Otherwise, they might be deformed.

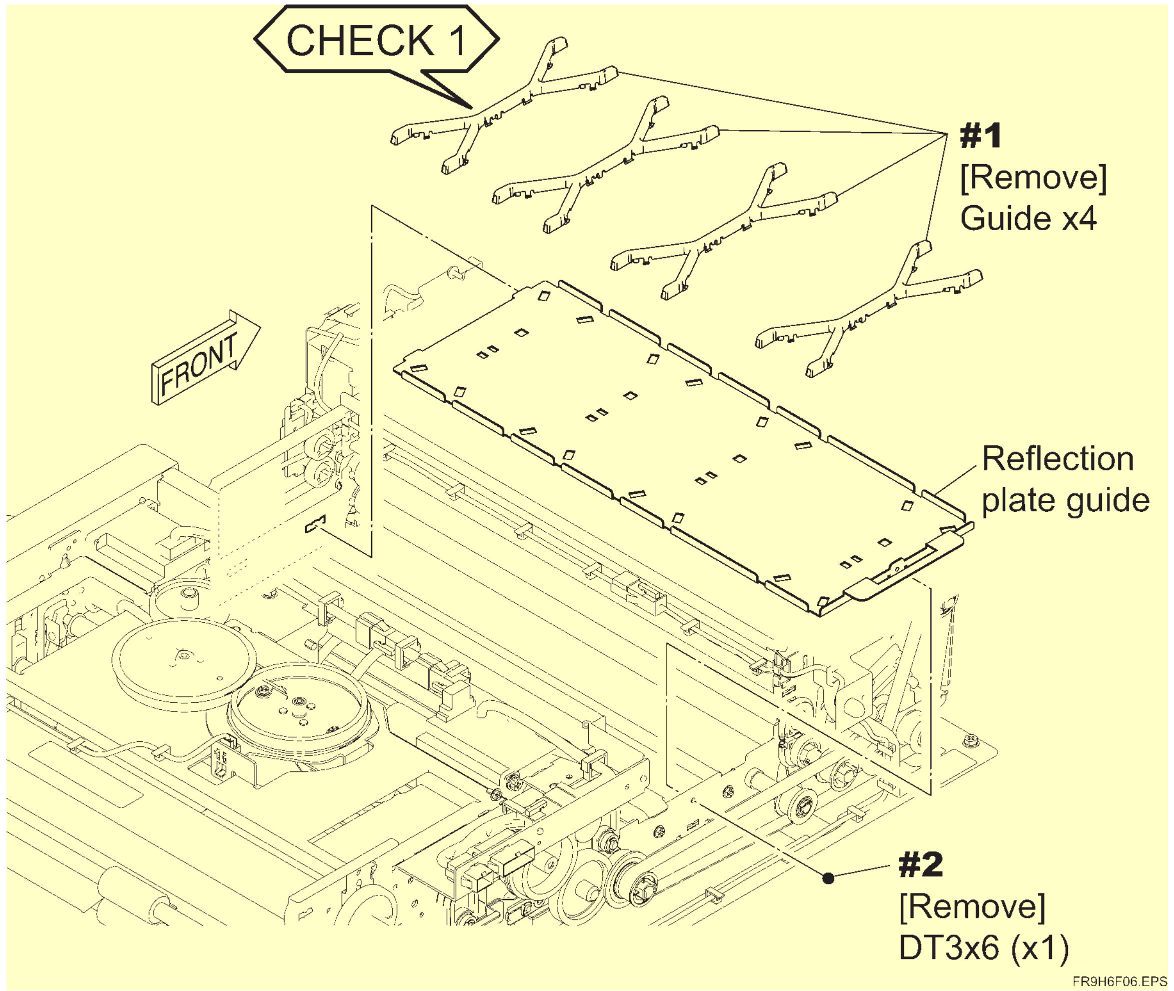

#3
[Remove]
TP3x6 (x2)
#5
[Clean]
Vacuum
cleaner
Guide x2
FRONT
#2
[Remove]
TP3x6 (x2)
FIT ON
#4
[Clean]
Vacuum
cleaner
Guide x1
#6
[Clean] Vacuum cleaner
Shock absorbing roller x3
#1
[Loosen]
Retainer x2
FR9H6F05.EPS

4. **Reinstall the IP switchback assembly in reverse order of removal.**

13.4 Cleaning the Reflection Plate Guide and Rubber Rollers

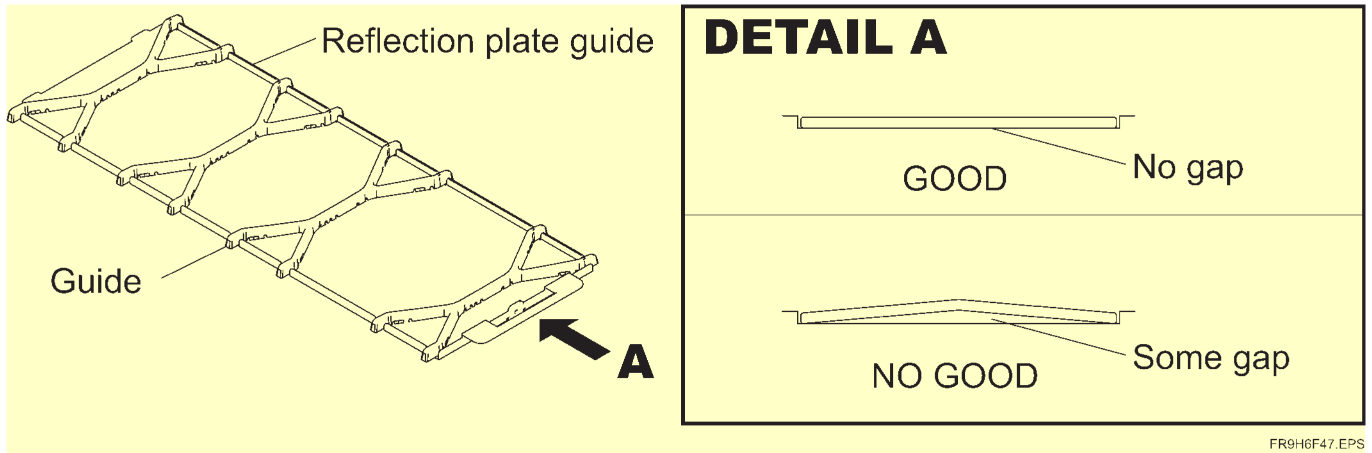
2Y ☞ {PM:13.5}

1. Remove the reflection plate guide.

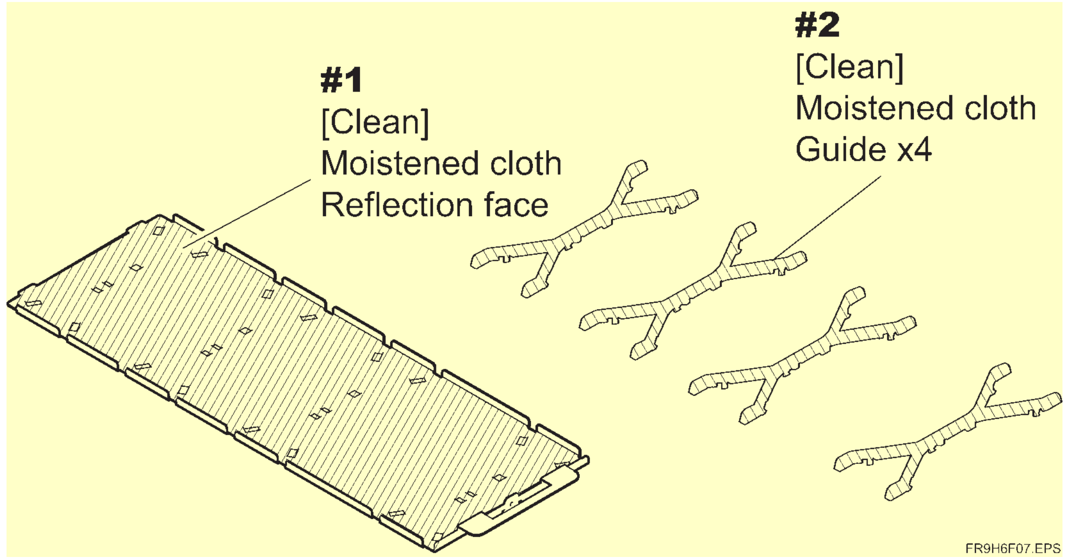

CHECK 1
#1
[Remove]
Guide x4
FRONT
Reflection plate guide
#2
[Remove]
DT3x6 (x1)
FR9H6F06.EPS

- **CHECK 1**

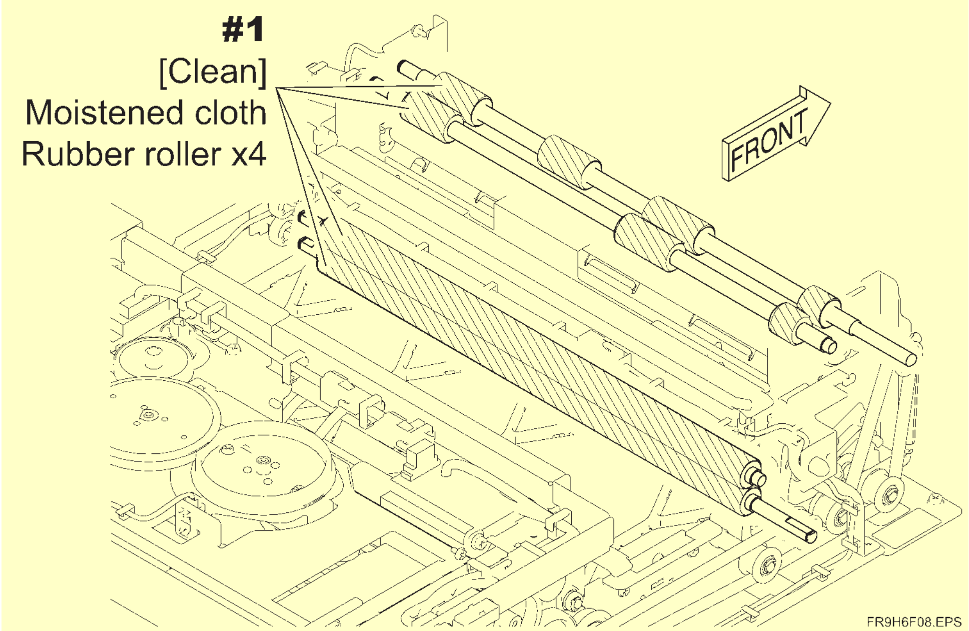
  When attaching the reflection plate guide, make sure that there is no gap between the reflection plate guide and the guides.


Reflection plate guide
Guide
A
DETAIL A
GOOD
No gap
NO GOOD
Some gap
FR9H6F47.EPS

2. Clean the reflection face and guides with a moistened cloth.


#1
[Clean]
Moistened cloth
Reflection face
#2
[Clean]
Moistened cloth
Guide x4
FR9H6F07.EPS

3. Clean the rubber rollers with a moistened cloth.

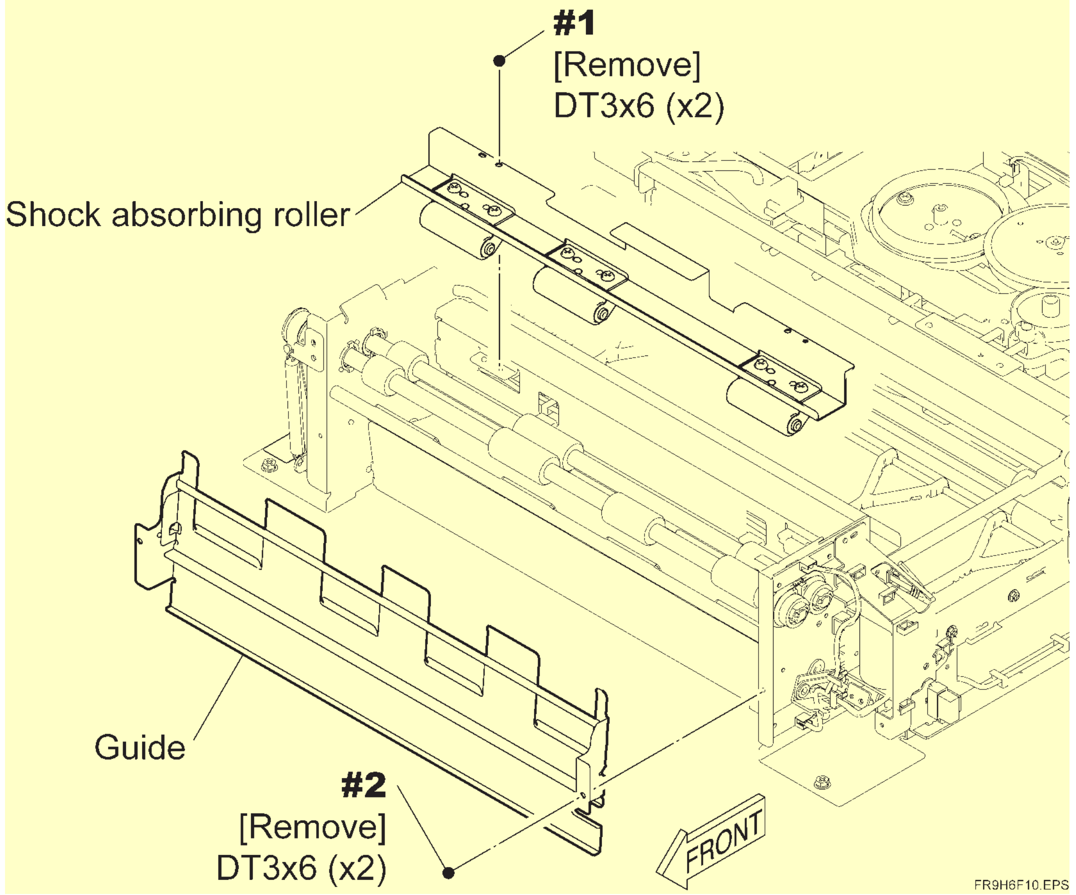

#1
[Clean]
Moistened cloth
Rubber roller x4
FRONT
FR9H6F08.EPS

4. Reinstall the reflection guide and guides in reverse order of removal.

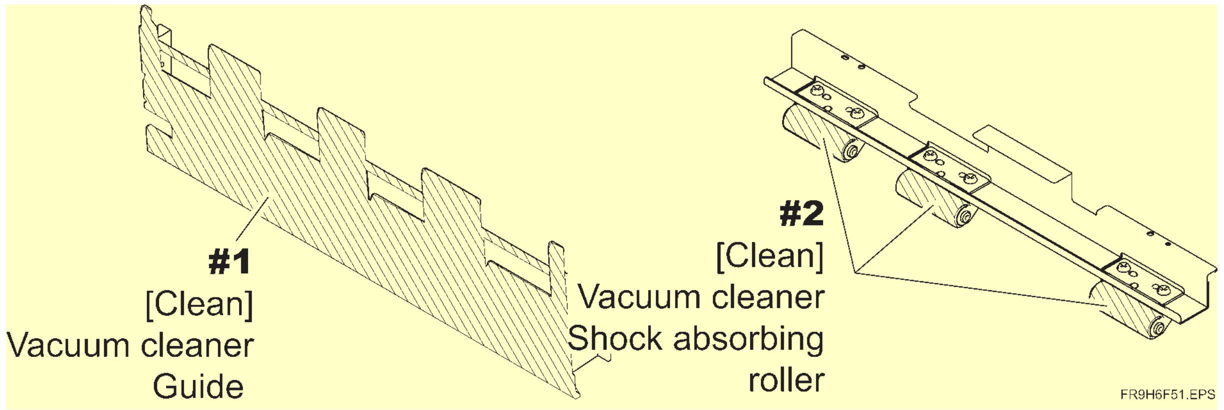
13.5 Cleaning the Shock-Absorbing Roller and Guide

2Y

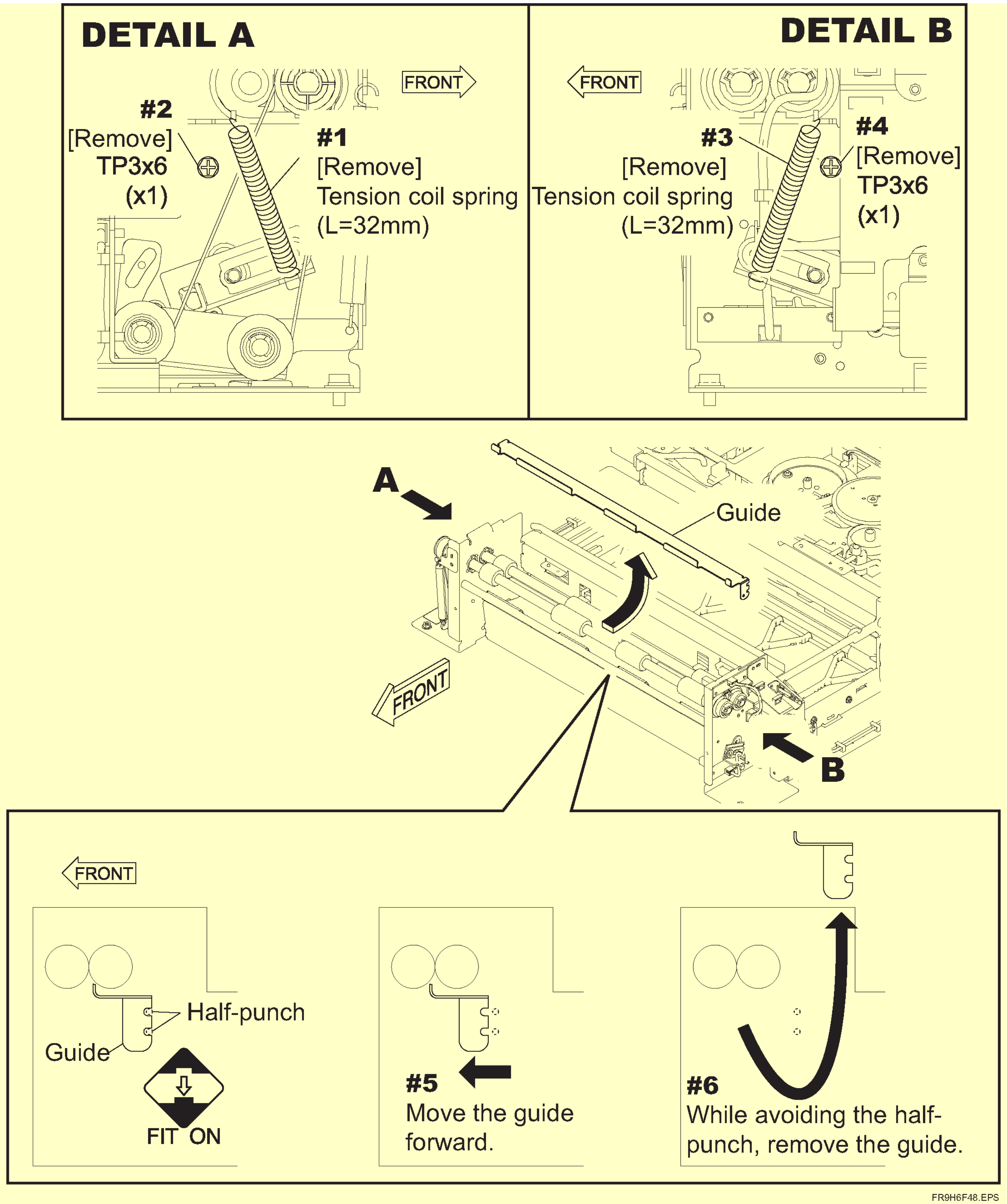
1. Remove the shock-absorbing roller assembly and guide.


#1
[Remove]
DT3x6 (x2)
Shock absorbing roller
Guide
#2
[Remove]
DT3x6 (x2)
FRONT
FR9H6F10.EPS

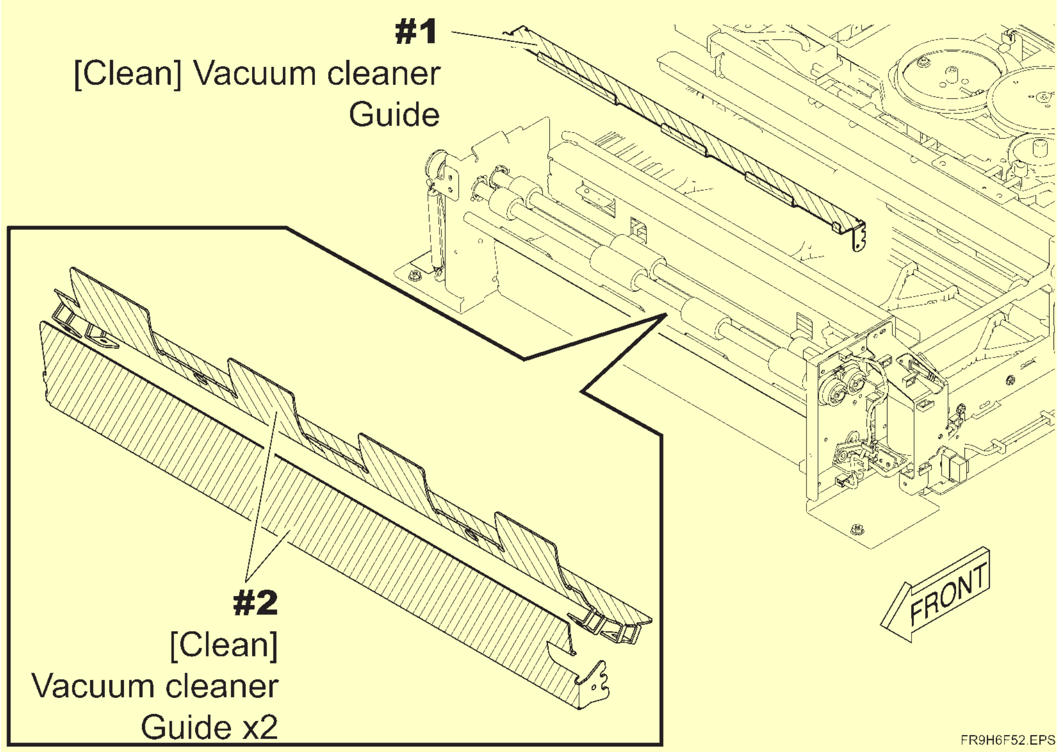
2. Clean the shock absorbing rollers and guide by use of a vacuum cleaner.


#1
[Clean]
Vacuum cleaner
Guide
#2
[Clean]
Vacuum cleaner
Shock absorbing
roller
FR9H6F51.EPS

3. Remove the guide.


DETAIL A
FRONT
#2
[Remove]
TP3x6
(x1)
#1
[Remove]
Tension coil spring
(L=32mm)
DETAIL B
FRONT
#3
[Remove]
Tension coil spring
(L=32mm)
#4
[Remove]
TP3x6
(x1)
A
Guide
FRONT
B
FRONT
Half-punch
Guide
FIT ON
#5
Move the guide
forward.
#6
While avoiding the half-
punch, remove the guide.
FR9H6F48.EPS

4. **Clean the guides by use of a vacuum cleaner.**

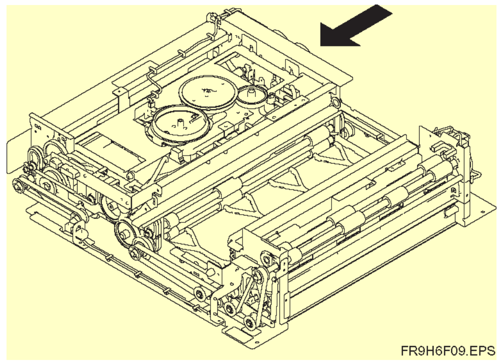

#1
[Clean] Vacuum cleaner
Guide
#2
[Clean]
Vacuum cleaner
Guide x2
FRONT
FR9H6F52.EPS

5. **Reinstall the shock absorbing roller assembly and guides in reverse order of removal.**

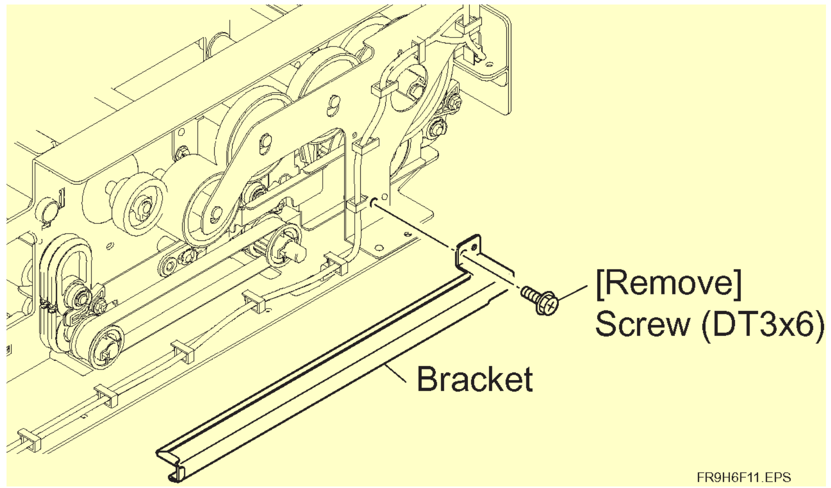
13.6 Removing the Latch Drive Unit

2Y

1. **Carry out the operations in the steps 2 to 7 from the direction indicated by the arrow in the figure below.**


FR9H6F09.EPS

2. **Remove the bracket.**

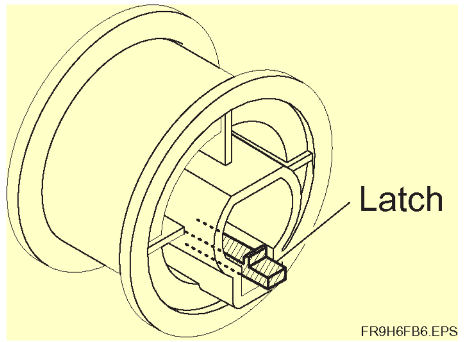

[Remove]
Screw (DT3x6)
Bracket
FR9H6F11.EPS

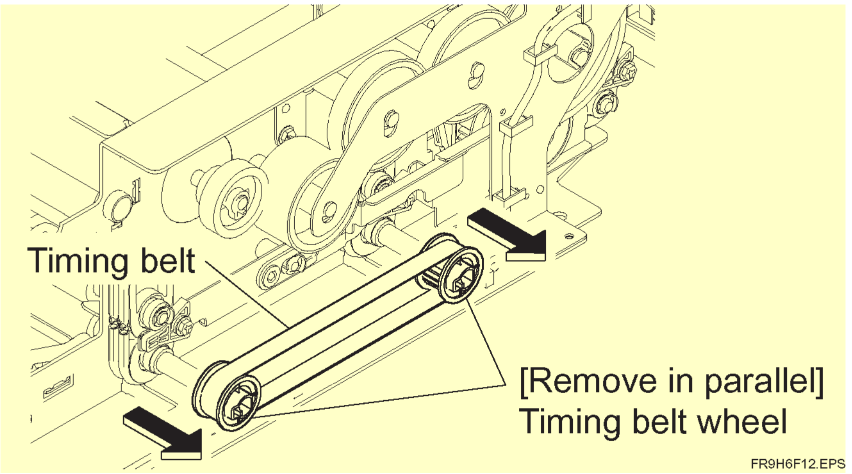
2Y ☞ {PM:13.6}

3. Remove the timing belt and the timing belt wheels.

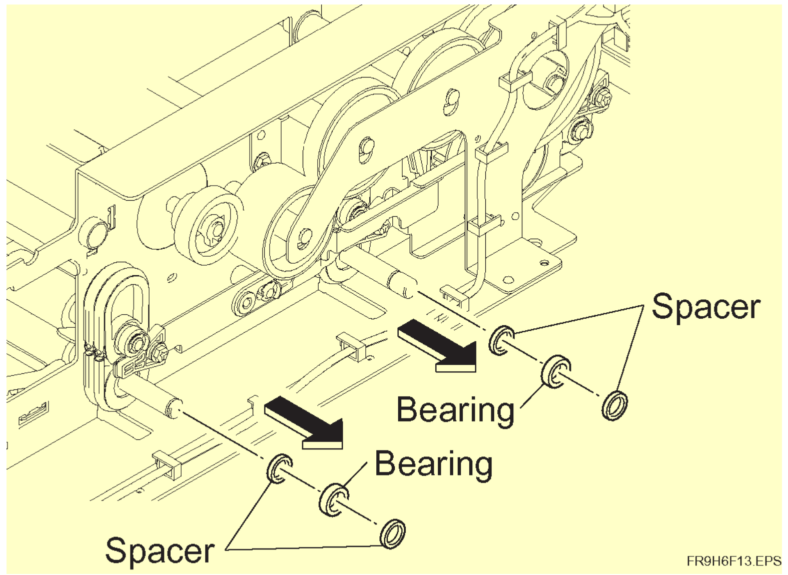
◆ **NOTE** ◆

Remove the two timing belt wheels in parallel. If only one is to be removed, the latch of the wheel gets damaged.

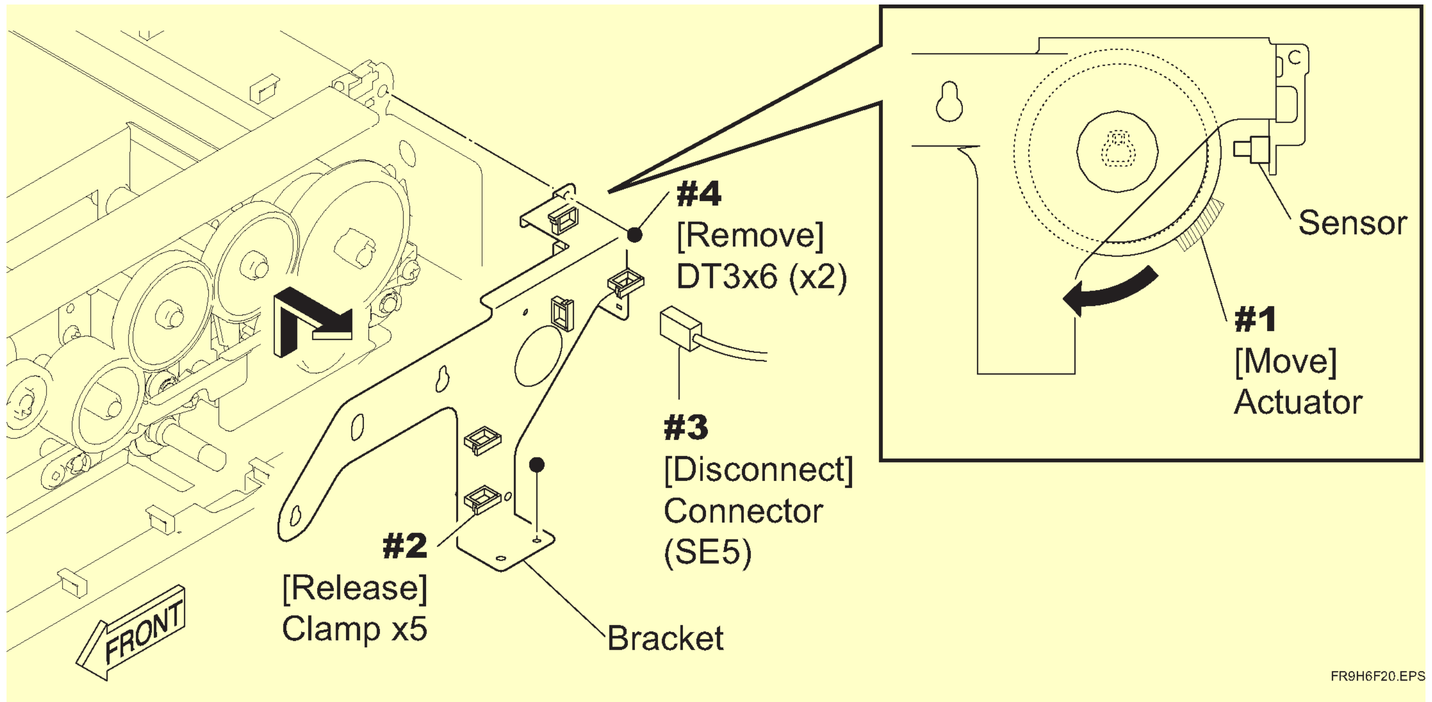

Latch
FR9H6FB6.EPS


Timing belt
[Remove in parallel]
Timing belt wheel
FR9H6F12.EPS

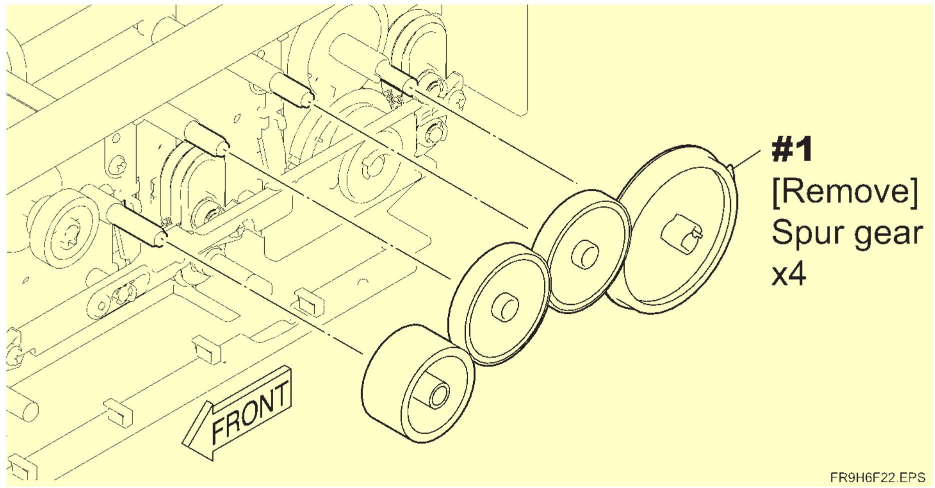
4. Remove the spacers and bearings.


Spacer
Bearing
Bearing
Spacer
FR9H6F13.EPS

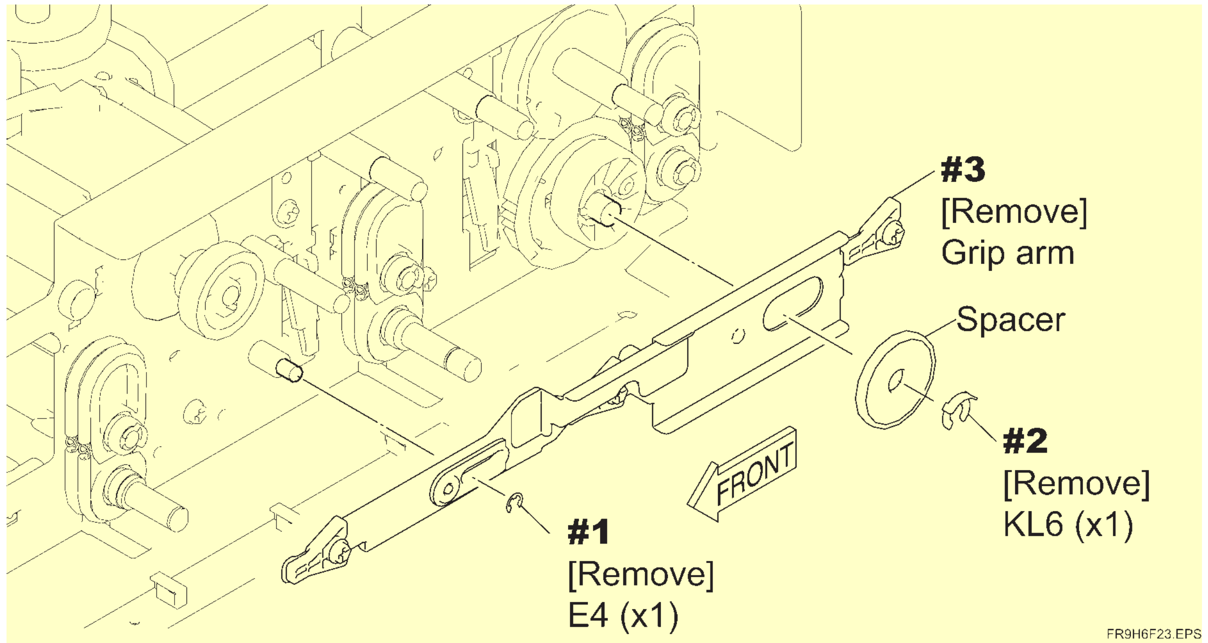
5. Remove the bracket.


#4
[Remove]
DT3x6 (x2)
Sensor
#1
[Move]
Actuator
#3
[Disconnect]
Connector
(SE5)
#2
[Release]
Clamp x5
Bracket
FRONT
FR9H6F20.EPS

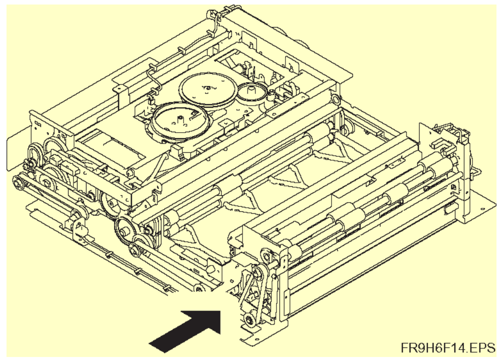
6. Remove the spur gears.


#1
[Remove]
Spur gear
x4
FRONT
FR9H6F22.EPS

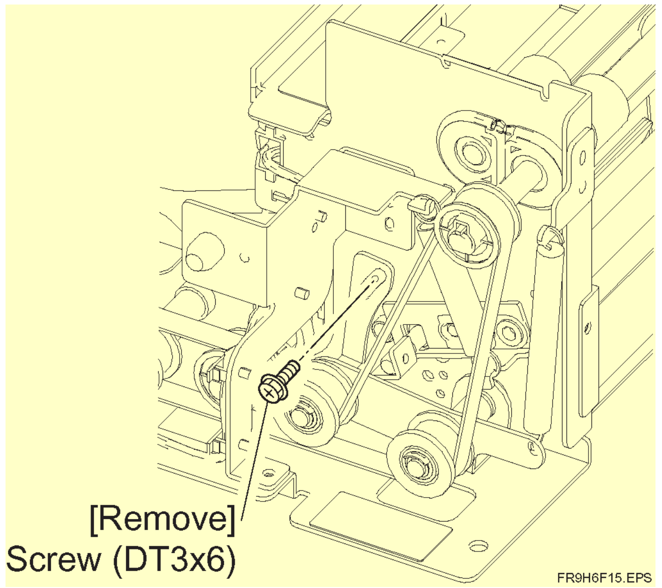
7. **Remove the grip arm (reference side).**


#3
[Remove]
Grip arm
Spacer
#2
[Remove]
KL6 (x1)
FRONT
#1
[Remove]
E4 (x1)
FR9H6F23.EPS

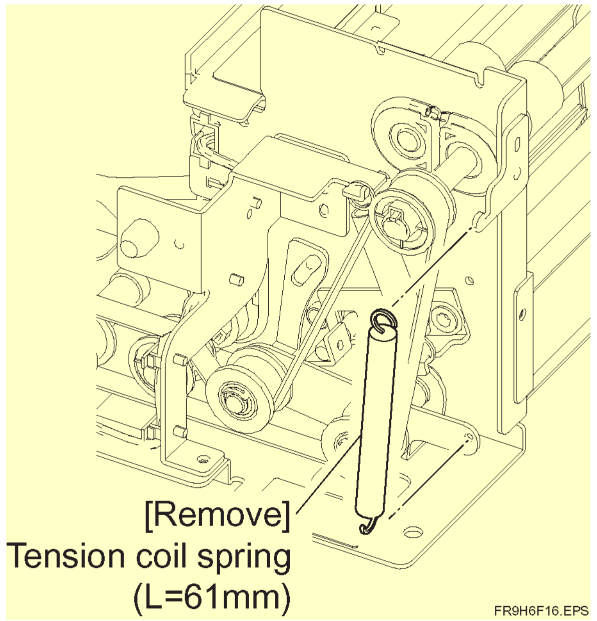
8. **Carry out the operations in the steps 9 to 11 from the direction indicated by the arrow in the figure below.**


FR9H6F14.EPS

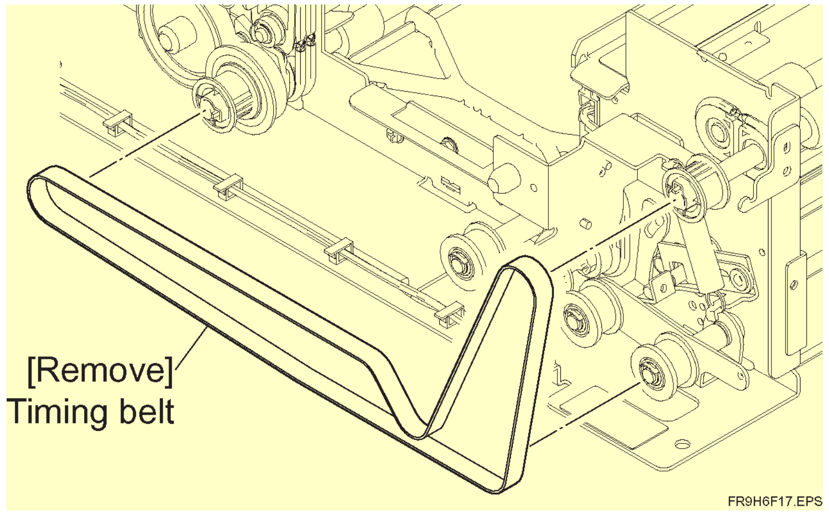
9. **Remove the screw.**


[Remove]
Screw (DT3x6)
FR9H6F15.EPS

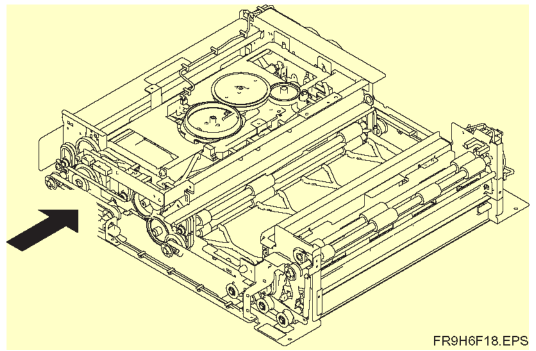
10. **Remove the tension coil spring.**


[Remove]
Tension coil spring
(L=61mm)
FR9H6F16.EPS

11. **Remove the timing belt.**


[Remove]
Timing belt
FR9H6F17.EPS

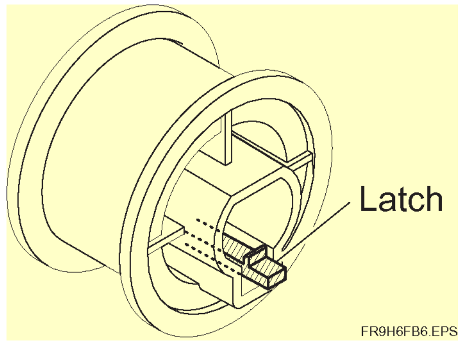
12. **Carry out the operations in the steps 13 to 17 from the direction indicated by the arrow in the figure below.**

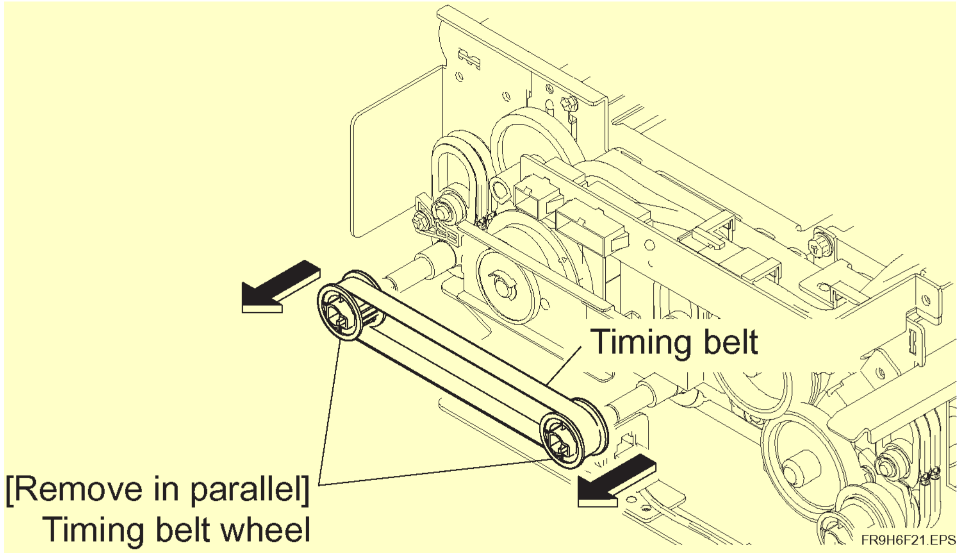

FR9H6F18.EPS

13. **Remove the timing belt and the timing belt wheels.**

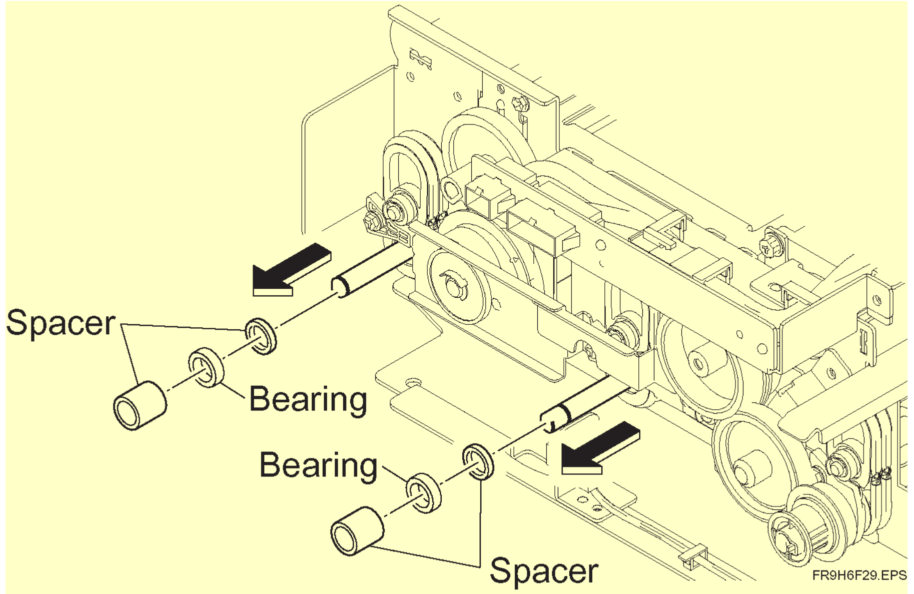
◆ ***NOTE*** ◆

Remove the two timing belt wheels in parallel. If only one is to be removed, the latch of the wheel gets damaged.

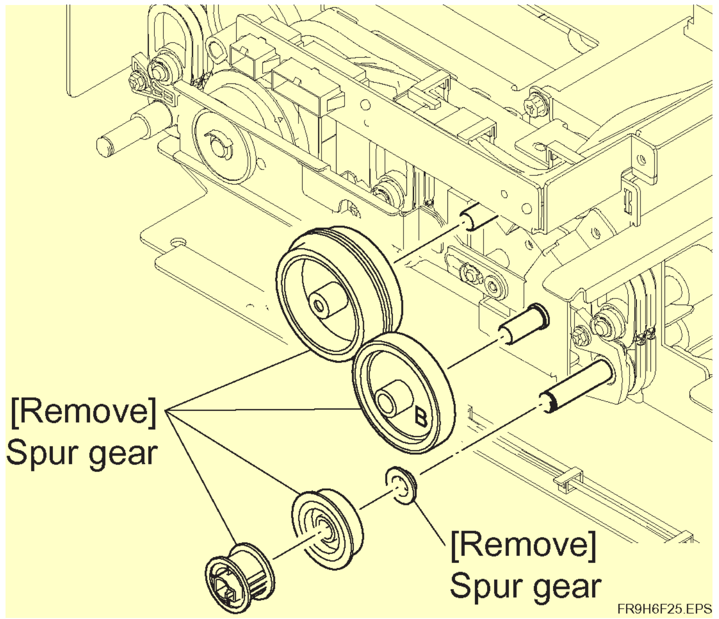

Latch
FR9H6FB6.EPS


Timing belt
[Remove in parallel]
Timing belt wheel
FR9H6F21.EPS

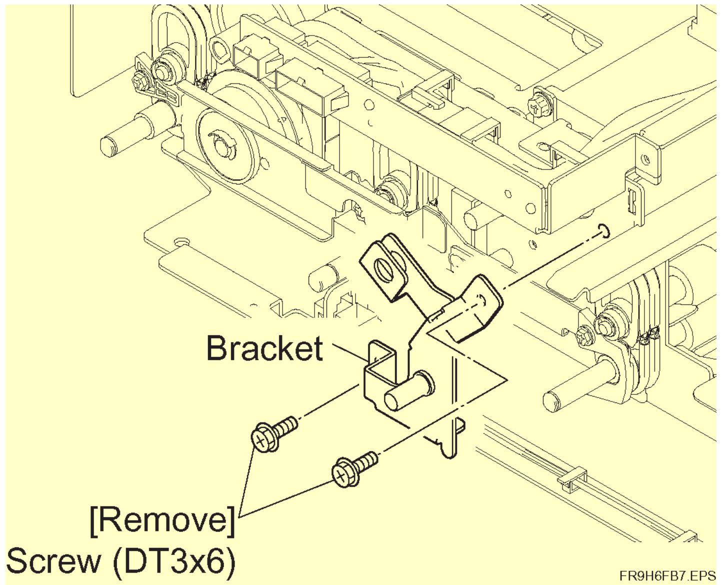
14. **Remove the spacers and bearings.**


Spacer
Bearing
Bearing
Spacer
FR9H6F29.EPS

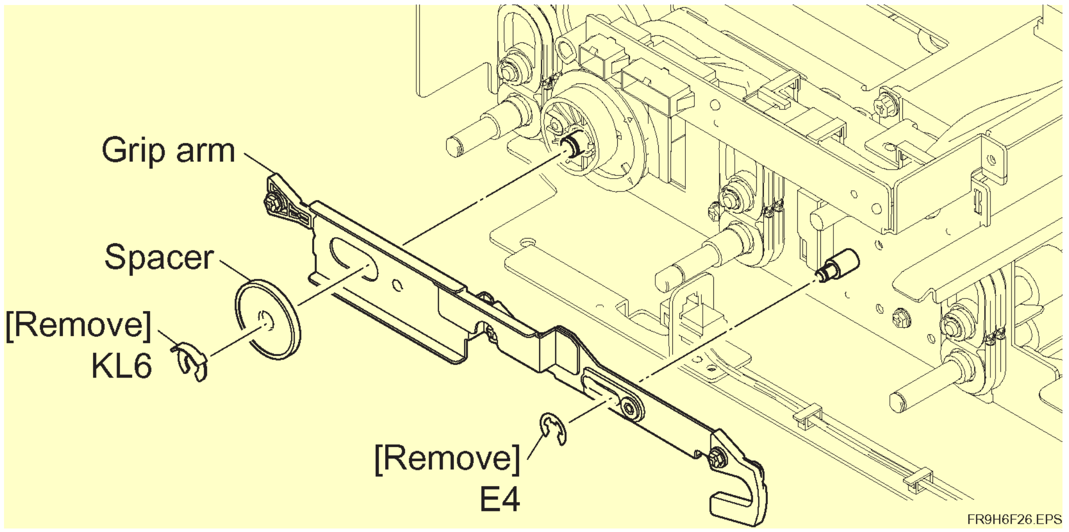
15. **Remove the spur gears.**


[Remove]
Spur gear
[Remove]
Spur gear
FR9H6F25.EPS

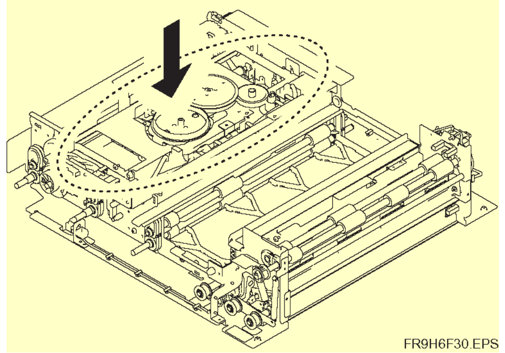
16. **Remove the bracket.**


Bracket
[Remove]
Screw (DT3x6)
FR9H6FB7.EPS

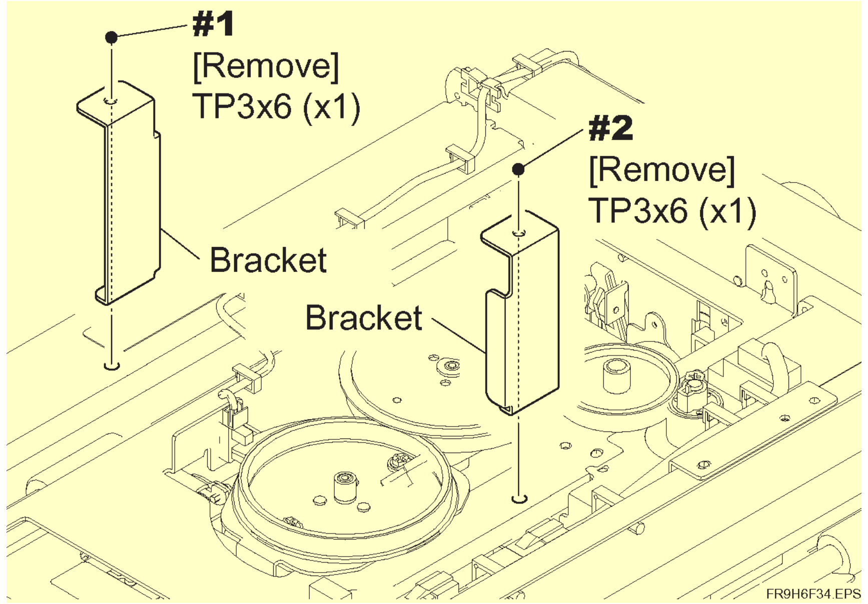
17. **Remove the grip arm (opposite reference side).**


Grip arm
Spacer
[Remove]
KL6
[Remove]
E4
FR9H6F26.EPS

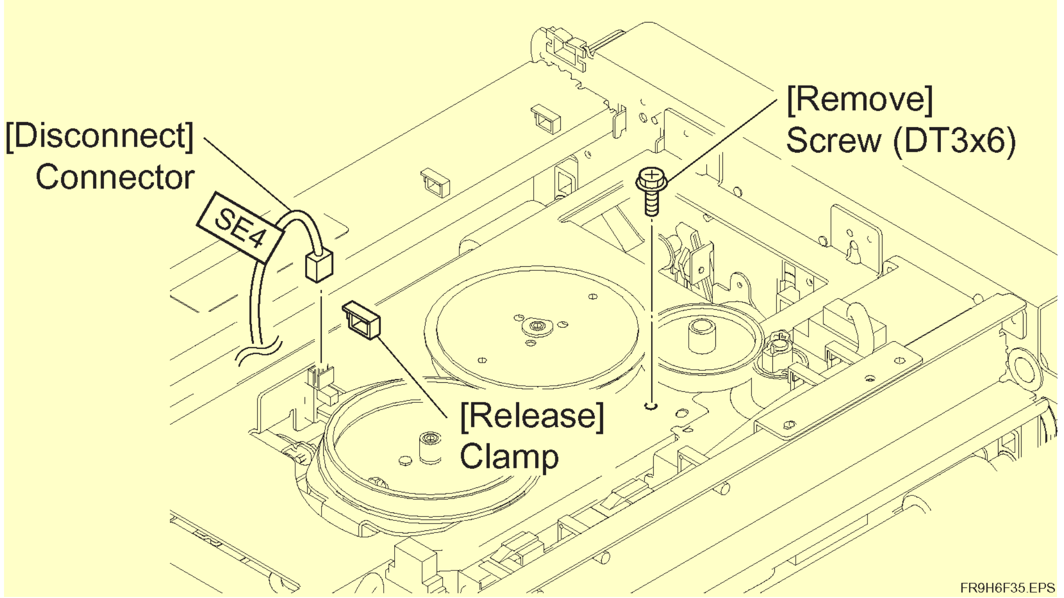
18. **Carry out the operations in the steps 19 to 21 from the direction indicated by the arrow in the figure below.**


FR9H6F30.EPS

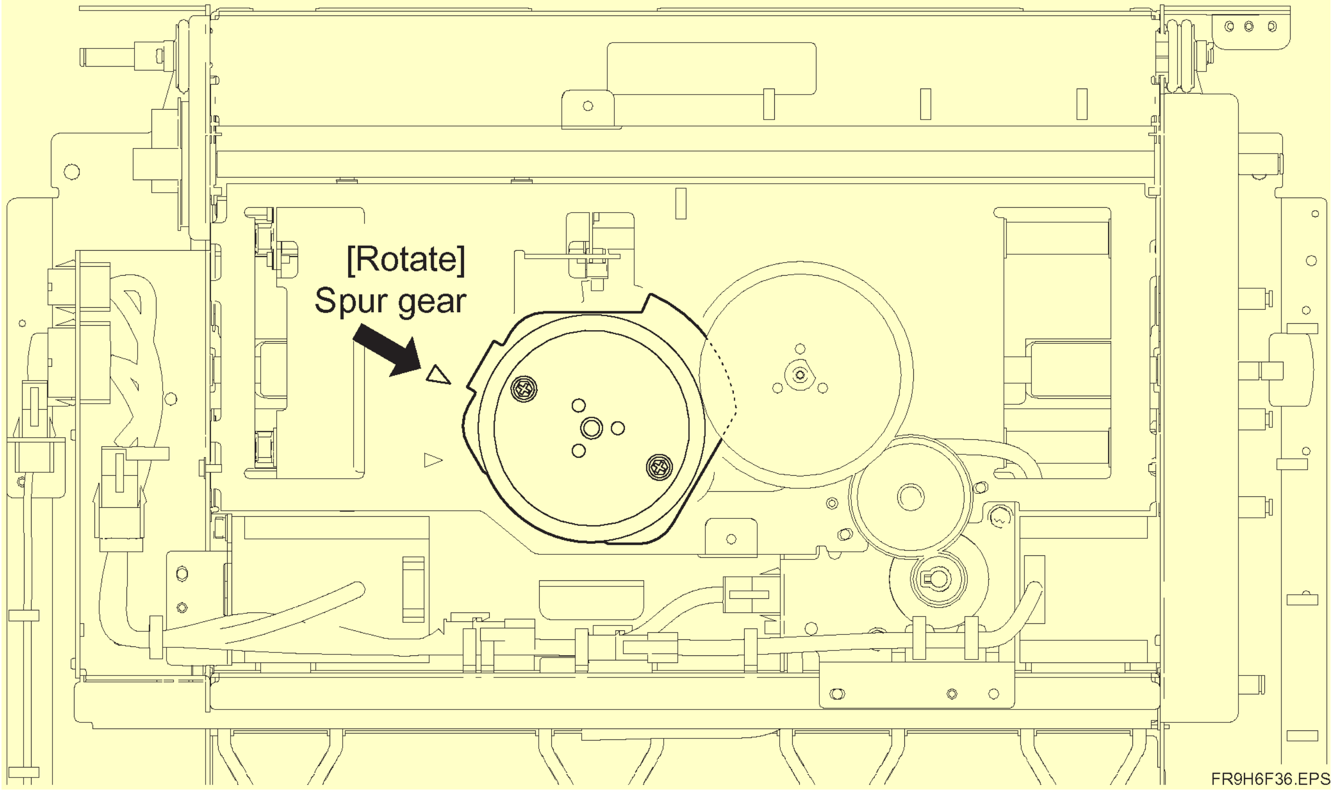
19. **Remove the brackets.**


#1
[Remove]
TP3x6 (x1)
#2
[Remove]
TP3x6 (x1)
Bracket
Bracket
FR9H6F34.EPS

20. **Release the clamp, and disconnect the connector and the screw.**

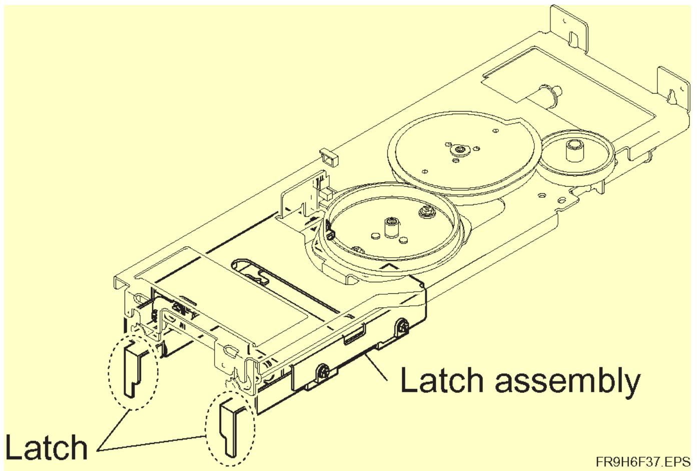

[Disconnect]
Connector
SE4
[Remove]
Screw (DT3x6)
[Release]
Clamp
FR9H6F35.EPS

21. **Rotate the spur gear of the latch drive unit to the position indicated by the arrow.**

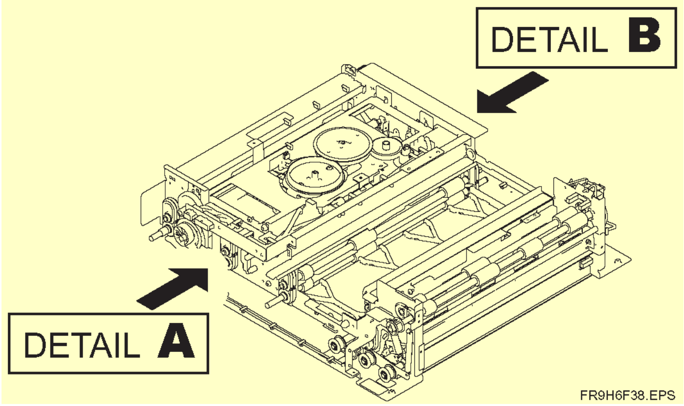

[Rotate]
Spur gear
FR9H6F36.EPS

◆ **NOTE** ◆

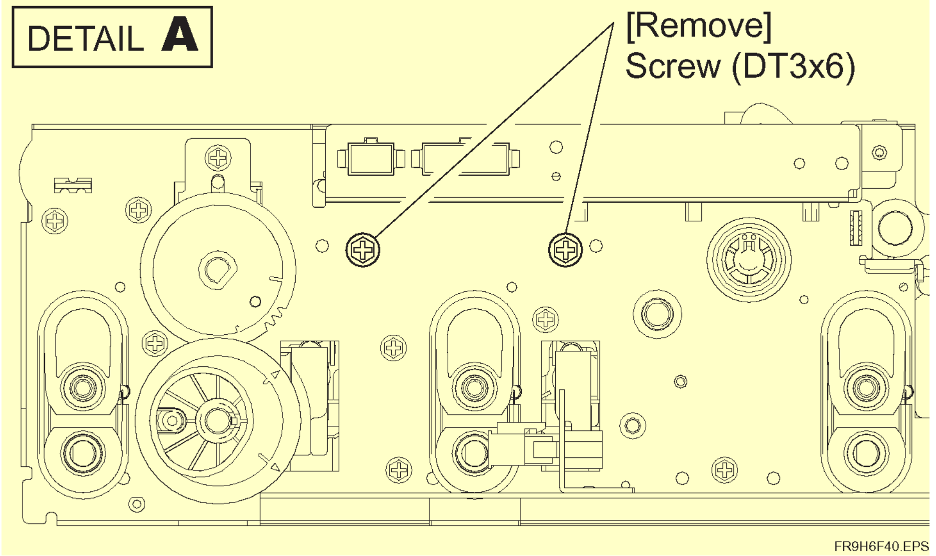
When the spur gear is rotated, the latch assembly moves inward. Unless the spur gear has moved to a specified position, the latch of the latch assembly might get damaged when the latch drive unit is removed.


Latch assembly
Latch
FR9H6F37.EPS

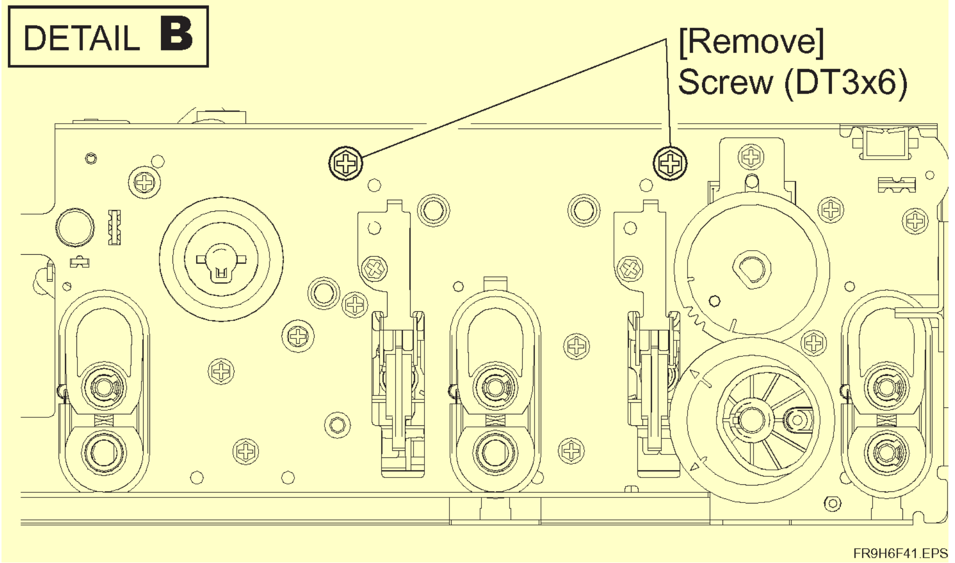
22. **Carry out the operations in the steps 23 and 24 from the direction indicated by the arrow in the figure below.**


DETAIL B
DETAIL A
FR9H6F38.EPS

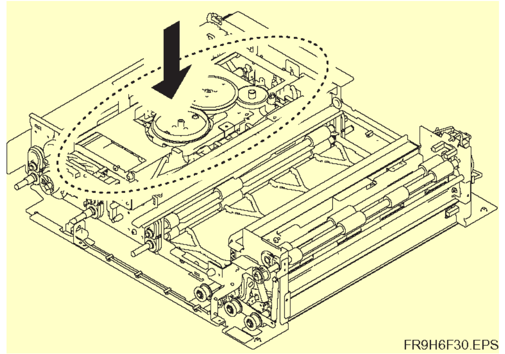
23. **Remove the screws.**


DETAIL A
[Remove]
Screw (DT3x6)
FR9H6F40.EPS

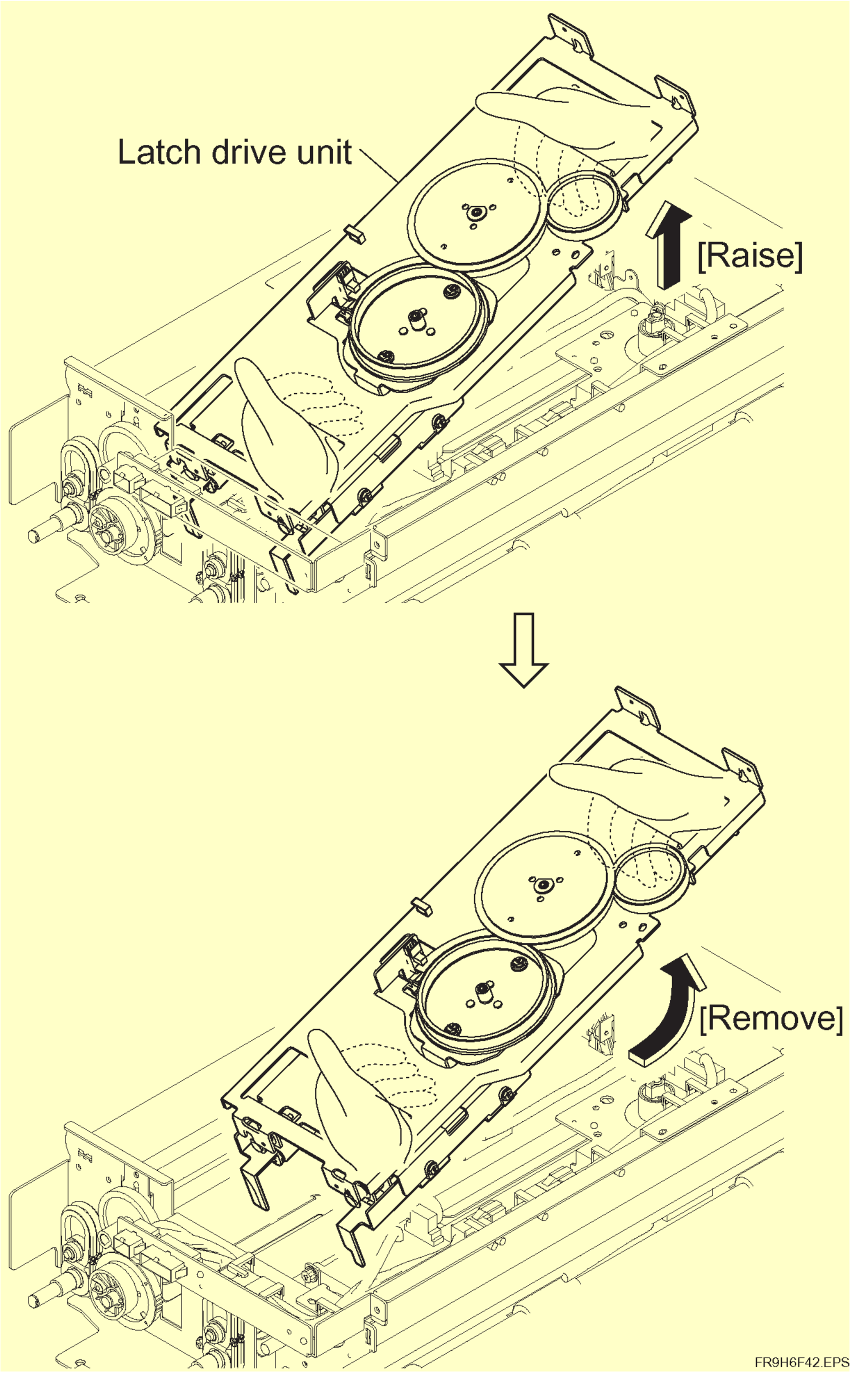
24. **Remove the screws.**


DETAIL B
[Remove]
Screw (DT3x6)
FR9H6F41.EPS

25. Carry out the operations in the step 26 from the direction indicated by the arrow in the figure below.


FR9H6F30.EPS

26. Remove the latch drive unit.

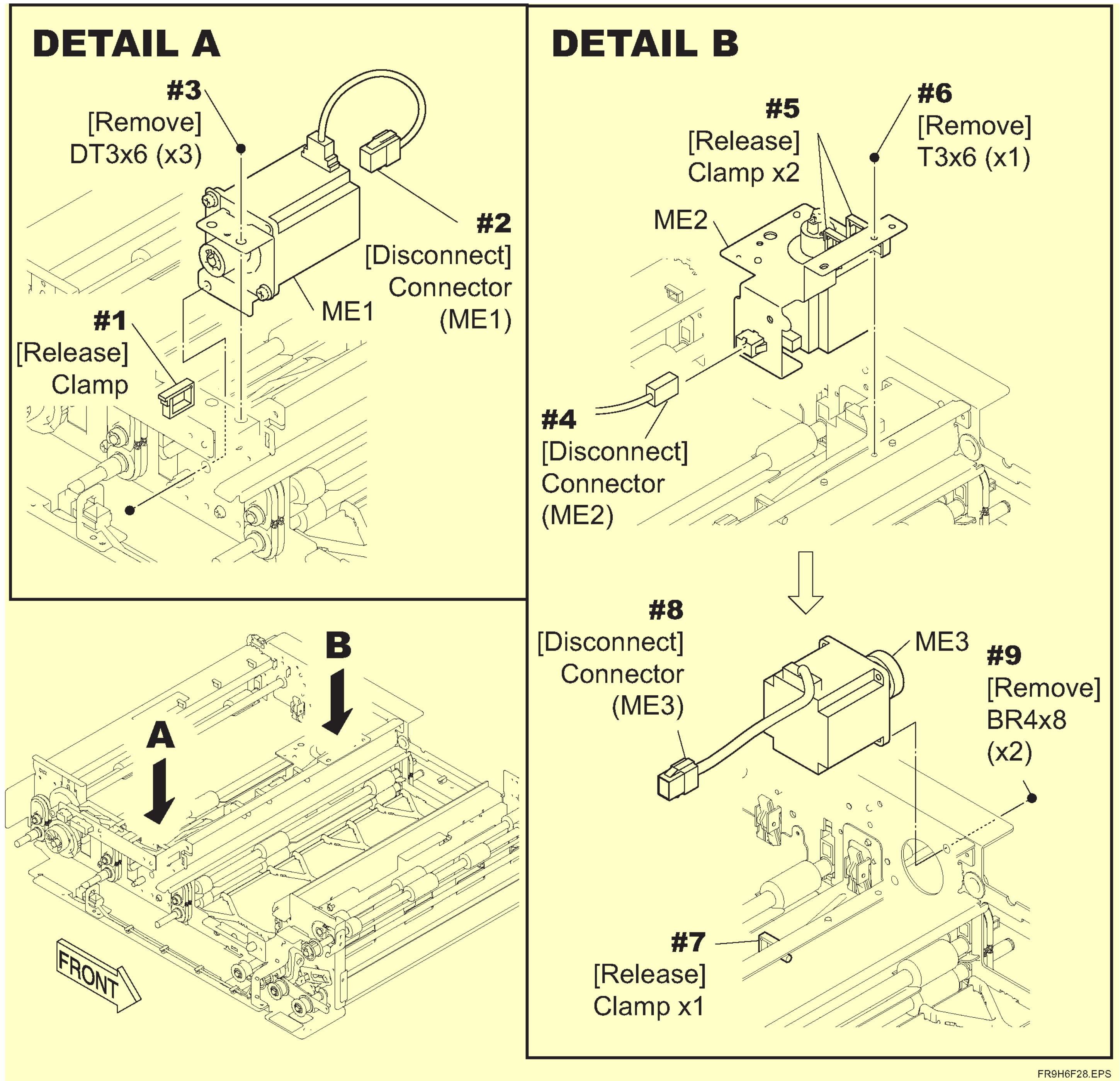

Latch drive unit
[Raise]
[Remove]
FR9H6F42.EPS

2Y ☞ {PM:13.7}

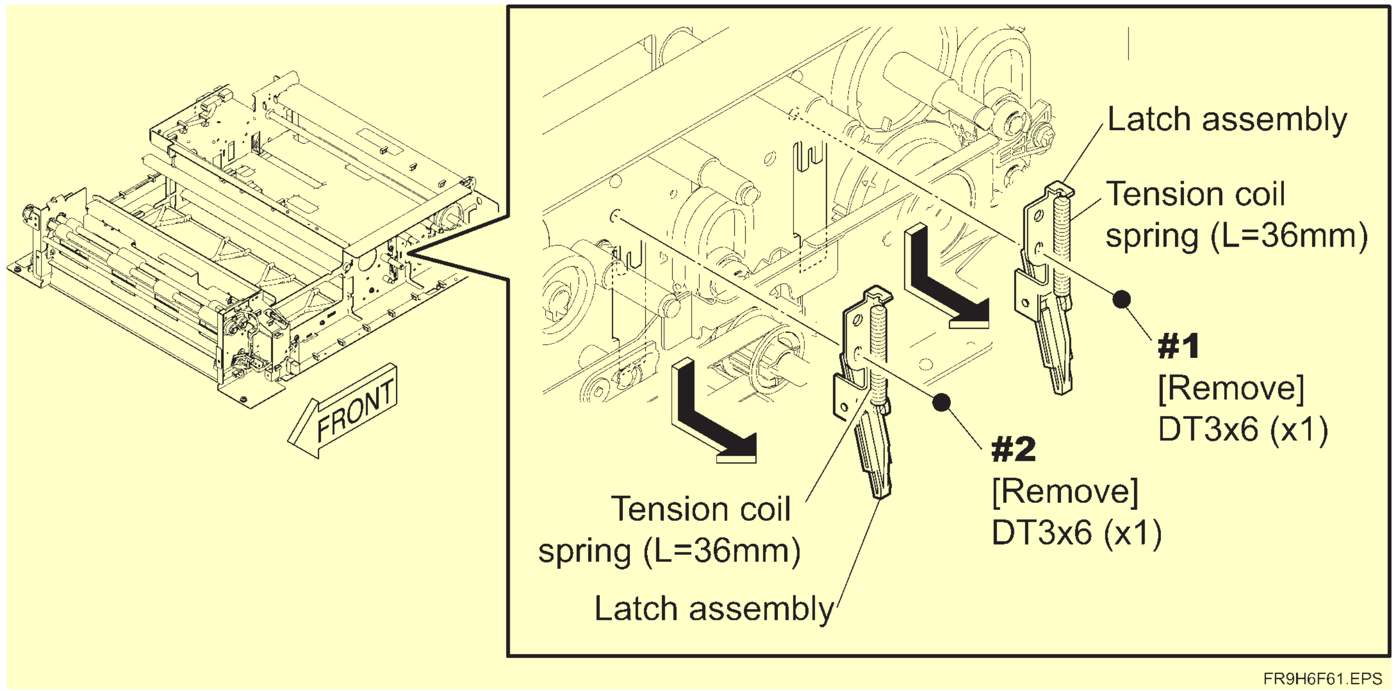
13.7 Cleaning the Rubber Roller and Guide

2Y

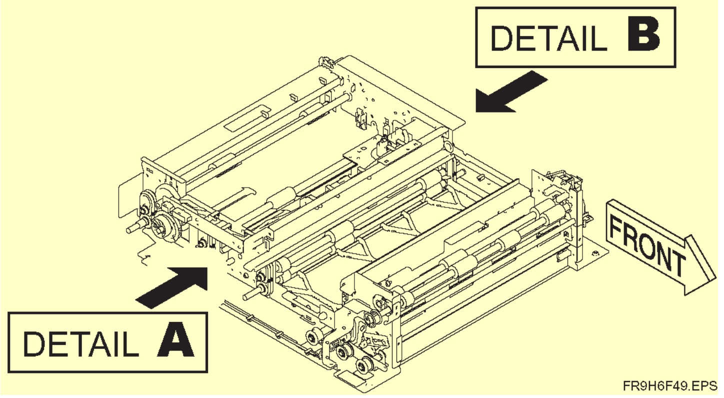
1. Remove the motors.


DETAIL A
#3
[Remove]
DT3x6 (x3)
#2
[Disconnect]
Connector
(ME1)
ME1
#1
[Release]
Clamp
DETAIL B
#5
[Release]
Clamp x2
#6
[Remove]
T3x6 (x1)
ME2
#4
[Disconnect]
Connector
(ME2)
#8
[Disconnect]
Connector
(ME3)
ME3
#9
[Remove]
BR4x8
(x2)
#7
[Release]
Clamp x1
A
B
FRONT
FR9H6F28.EPS

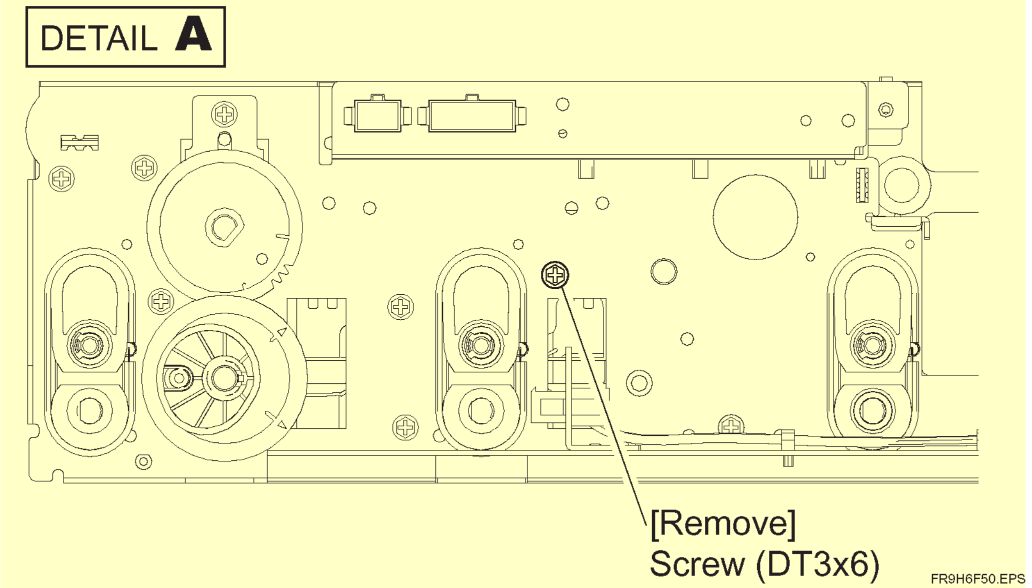
2. **Remove the latch assembly (reference side).**


Latch assembly
Tension coil spring (L=36mm)
#1
[Remove]
DT3x6 (x1)
#2
[Remove]
DT3x6 (x1)
Tension coil spring (L=36mm)
Latch assembly
FRONT
FR9H6F61.EPS

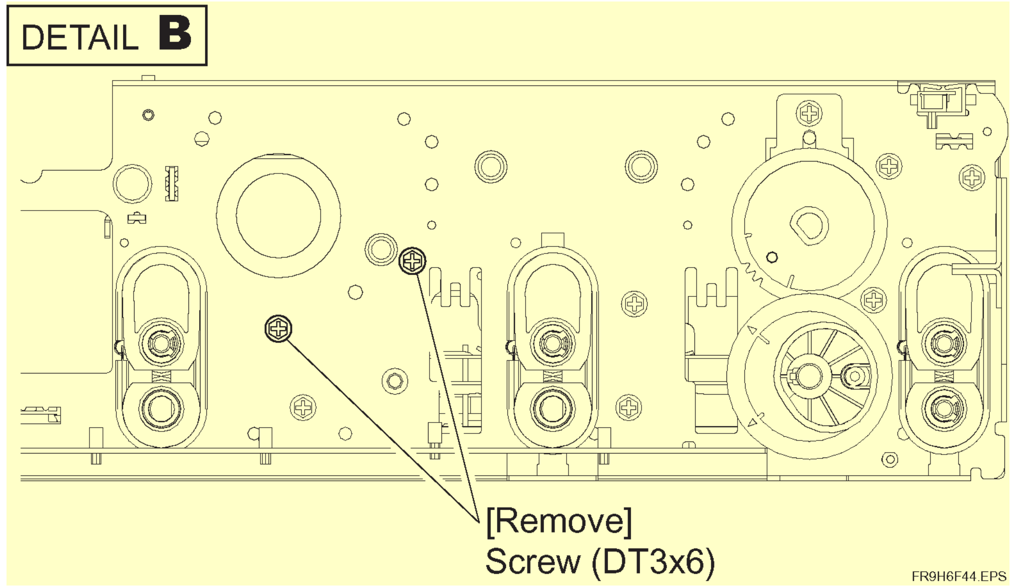
3. **Carry out the operations in the steps 4 and 5 from the direction indicated by the arrow in the figure below.**


DETAIL B
DETAIL A
FRONT
FR9H6F49.EPS

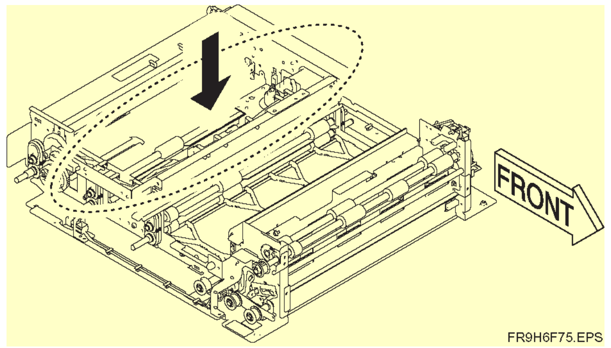
4. **Remove the screw.**


DETAIL A
[Remove]
Screw (DT3x6)
FR9H6F50.EPS

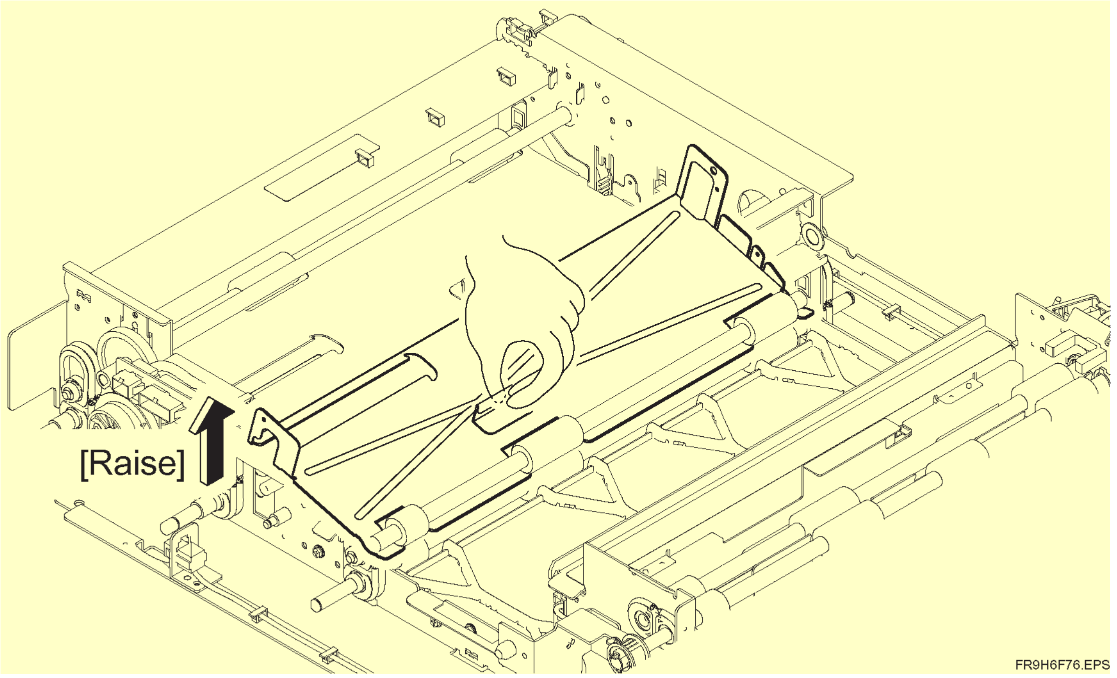
5. **Remove the screws.**


DETAIL B
[Remove]
Screw (DT3x6)
FR9H6F44.EPS

6. **Carry out the operations in the steps 7 and 8 from the direction indicated by the arrow in the figure below.**


FRONT
FR9H6F75.EPS

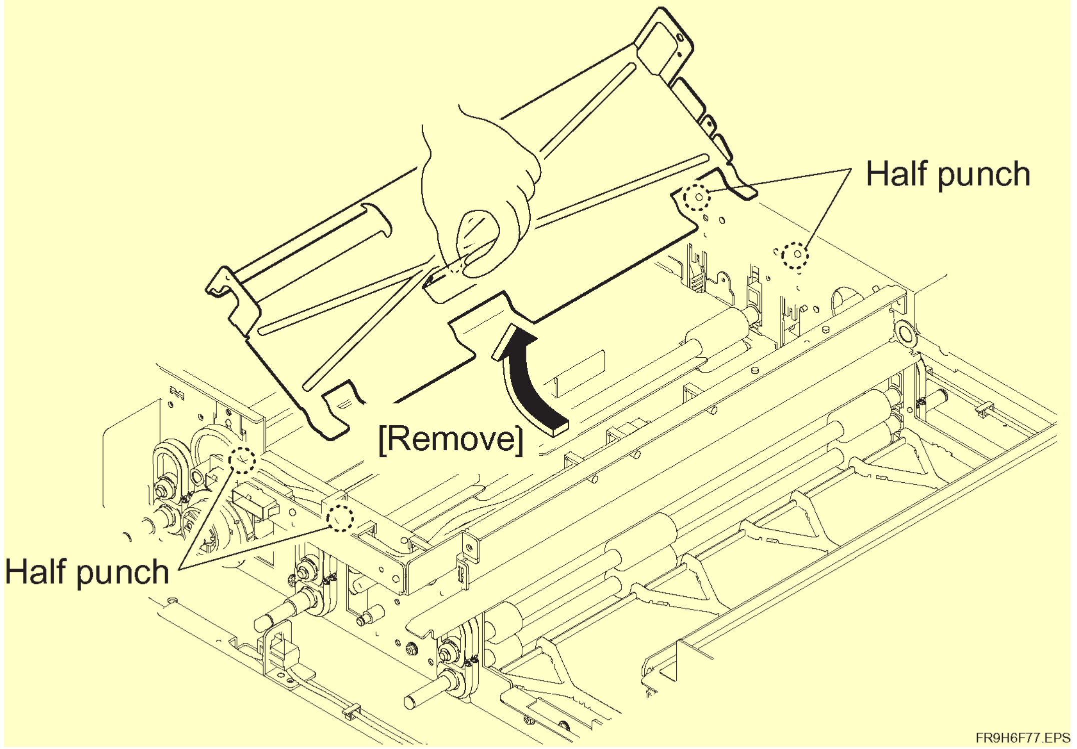
7. **Raise the rear of the guide.**


[Raise]
FR9H6F76.EPS

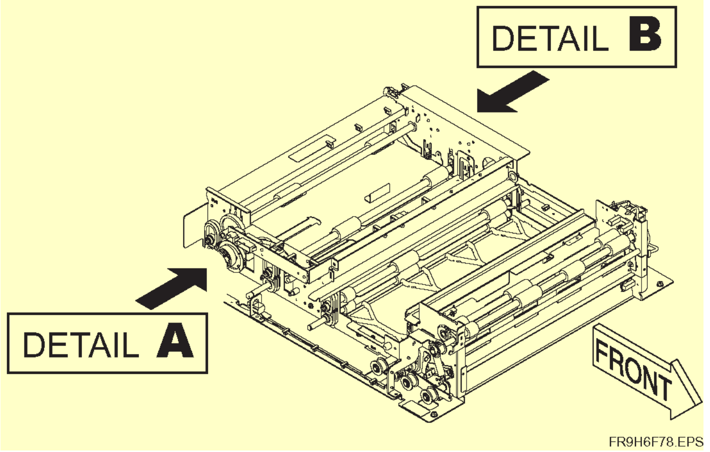
8. **Remove the guide while keeping clear of the half punches inside the side plate.**

◆ *NOTE* ◆

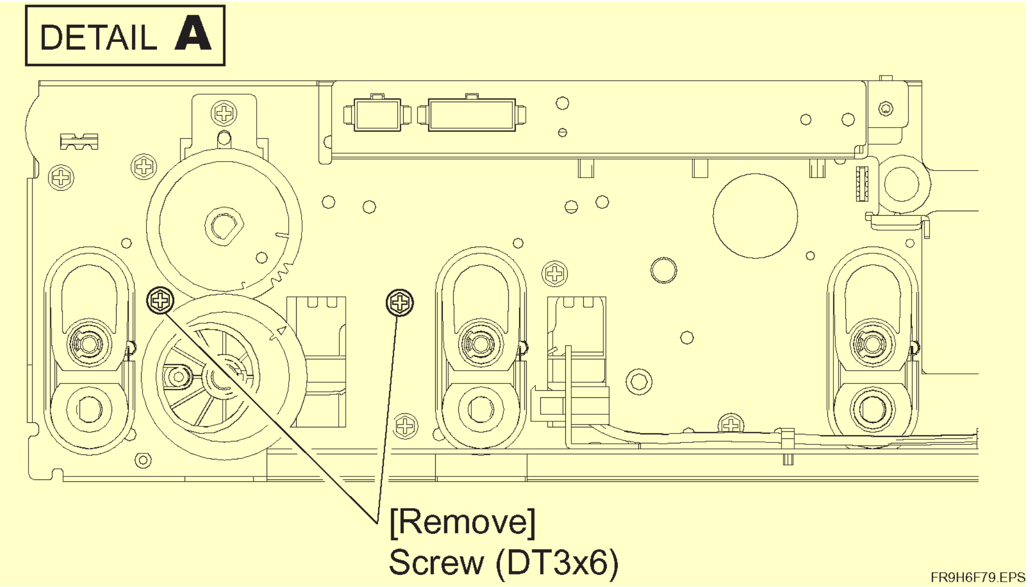
Remove the guide carefully not to allow the guide to tilt laterally. If the guide is tilted, it might get caught with the side plate and cannot be removed.


Half punch
[Remove]
Half punch
FR9H6F77.EPS

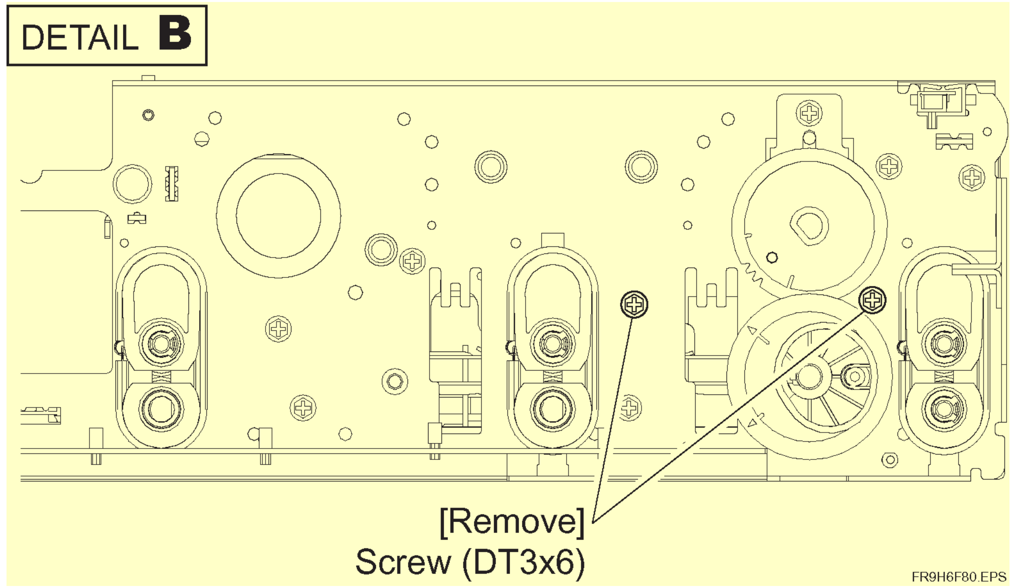
9. **Carry out the operations in the steps 10 and 11 from the direction indicated by the arrow in the figure below.**


DETAIL B
DETAIL A
FRONT
FR9H6F78.EPS

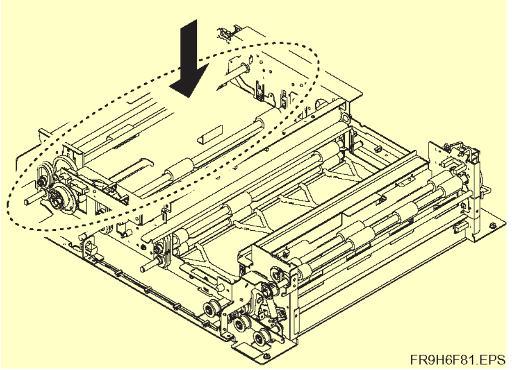
10. **Remove the screws.**


DETAIL A
[Remove]
Screw (DT3x6)
FR9H6F79.EPS

11. **Remove the screws.**


DETAIL B
[Remove]
Screw (DT3x6)
FR9H6F80.EPS

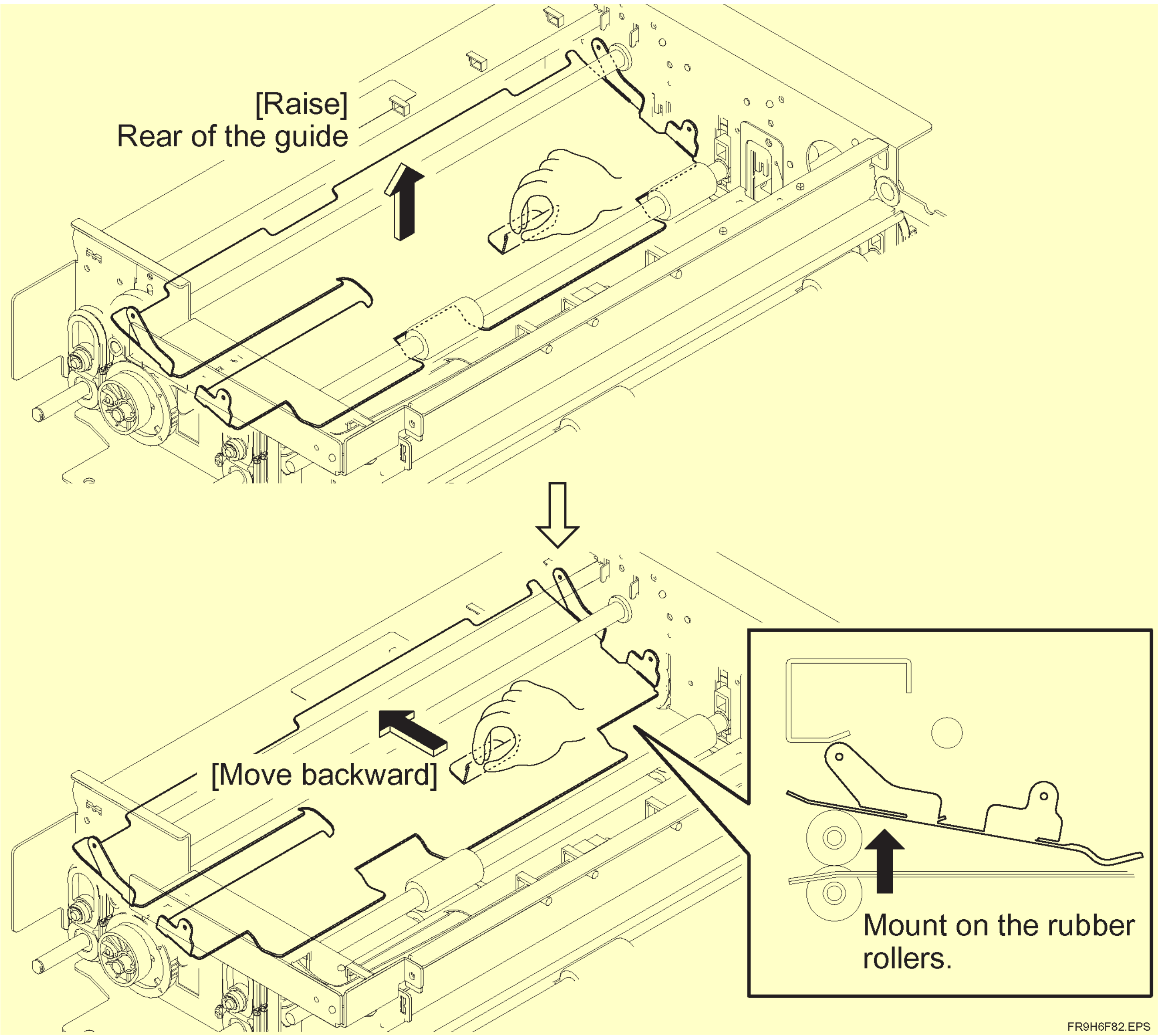
12. **Carry out the operations in the steps 13 to 16 from the direction indicated by the arrow in the figure below.**


FR9H6F81.EPS

13. **Raise the rear of the guide and move it backward.**

◆ NOTE ◆

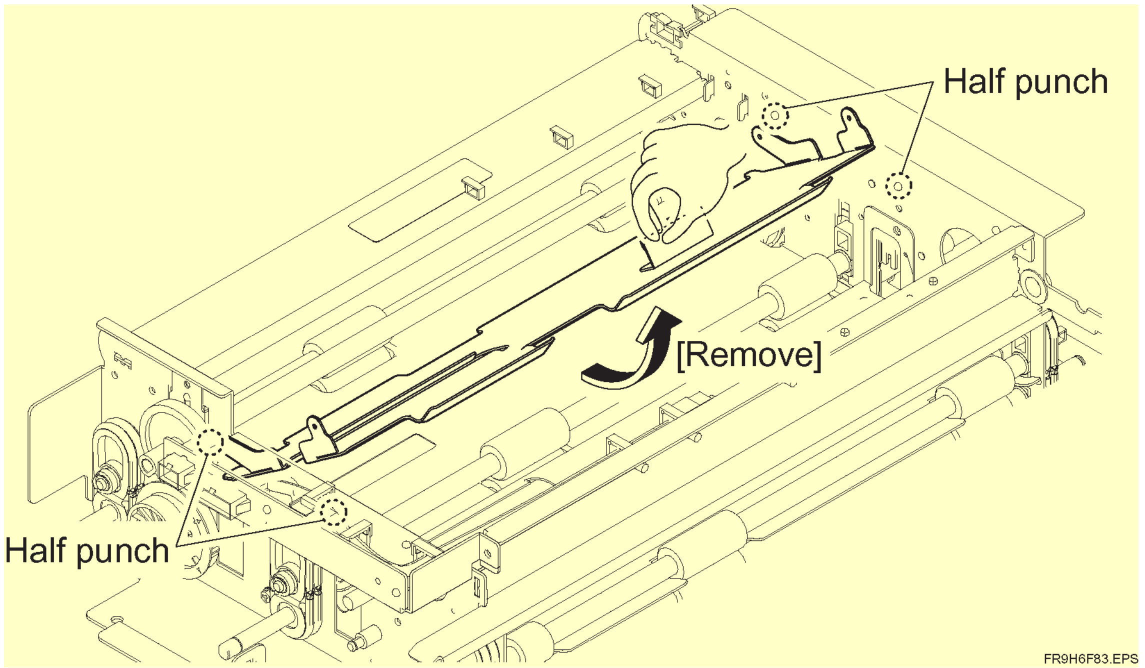
Move the guide backward carefully not to allow the guide to tilt laterally. If the guide is tilted, it might get caught with the side plate and cannot be removed.


[Raise]
Rear of the guide
[Move backward]
Mount on the rubber rollers.
FR9H6F82.EPS

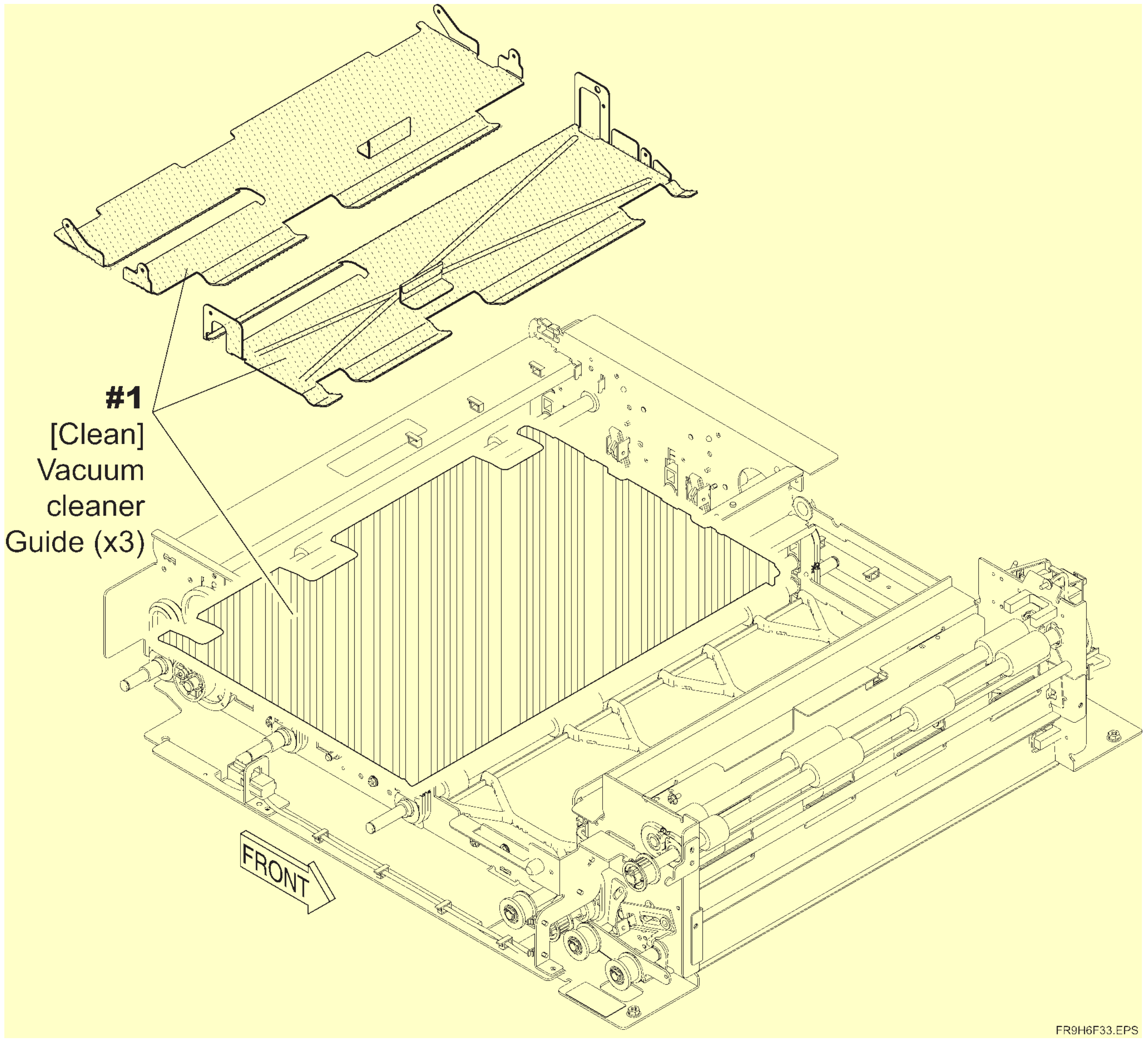
14. **Remove the guide while keeping clear of the half punches inside the side plate.**

◆ NOTE ◆

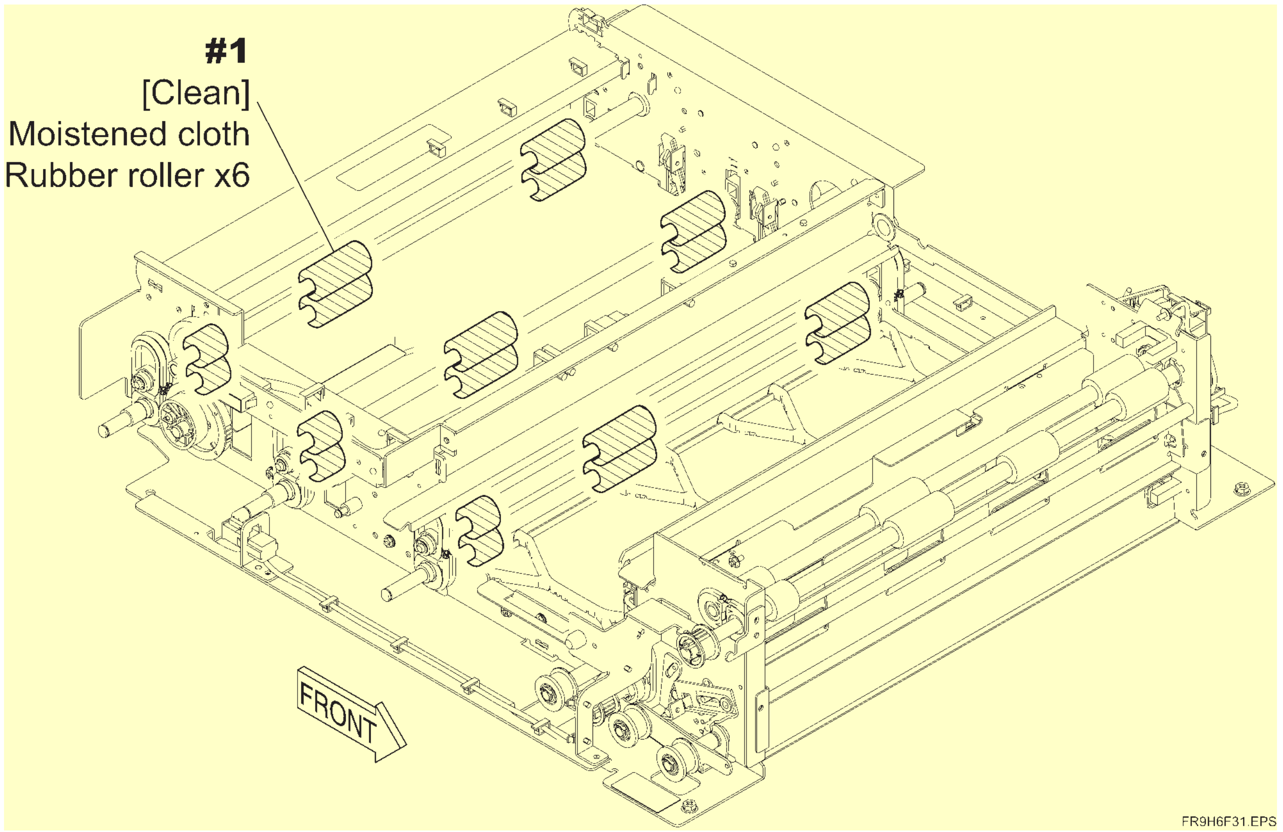
Remove the guide carefully not to allow the guide to tilt laterally. If the guide is tilted, it might get caught with the side plate and cannot be removed.


Half punch
[Remove]
Half punch
FR9H6F83.EPS

15. Clean the guides by use of a vacuum cleaner.


#1
[Clean]
Vacuum
cleaner
Guide (x3)
FRONT
FR9H6F33.EPS

16. Clean the rubber rollers with a moistened cloth.


#1
[Clean]
Moistened cloth
Rubber roller x6
FRONT
FR9H6F31.EPS

2Y ☞ {PM:13.8}

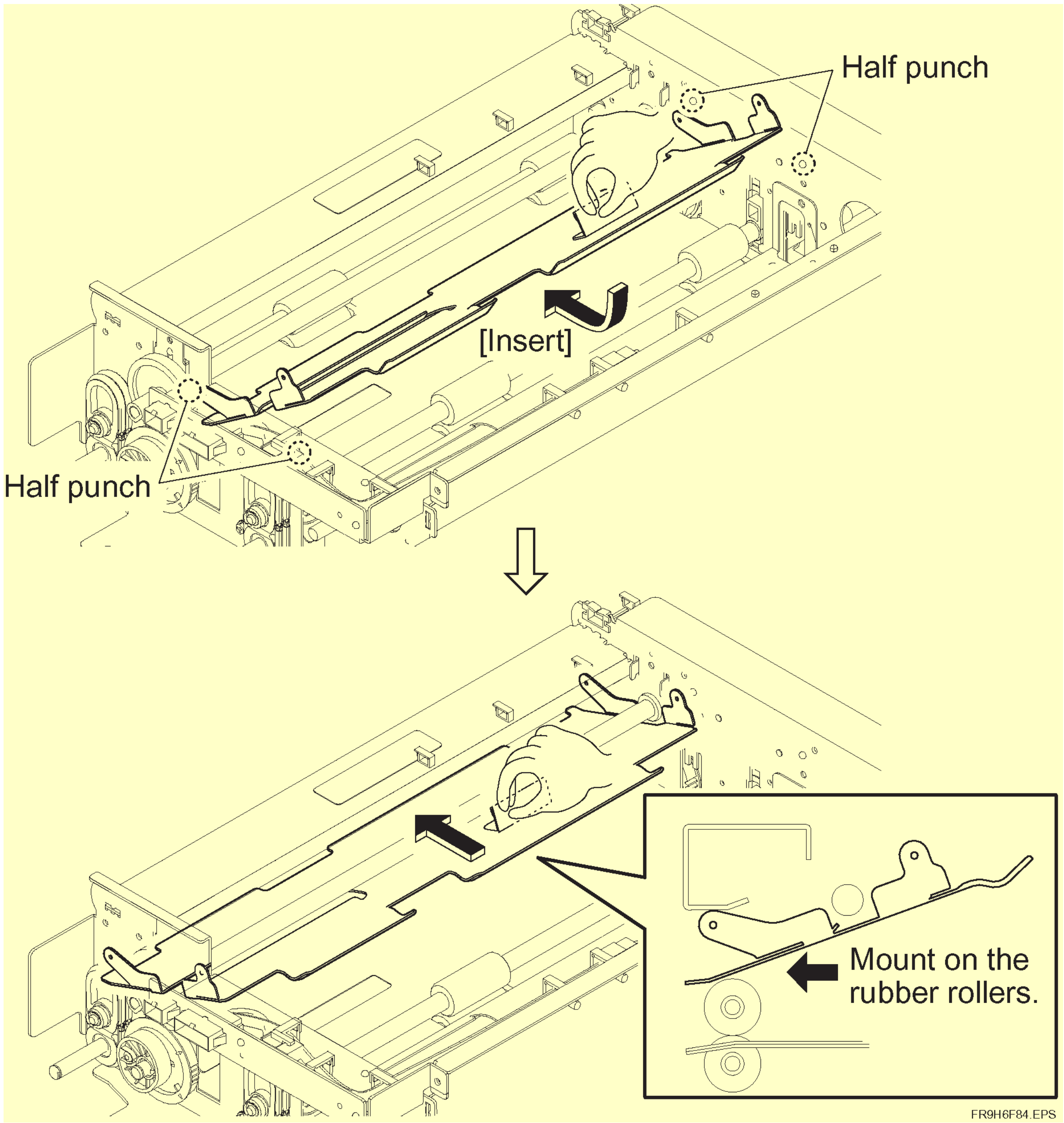
13.8 Reinstalling the Guides

2Y

1. **Insert the guide while keeping clear of the half punches, and lead the tip of the guide onto the half punch in the side plate.**

◆ NOTE ◆

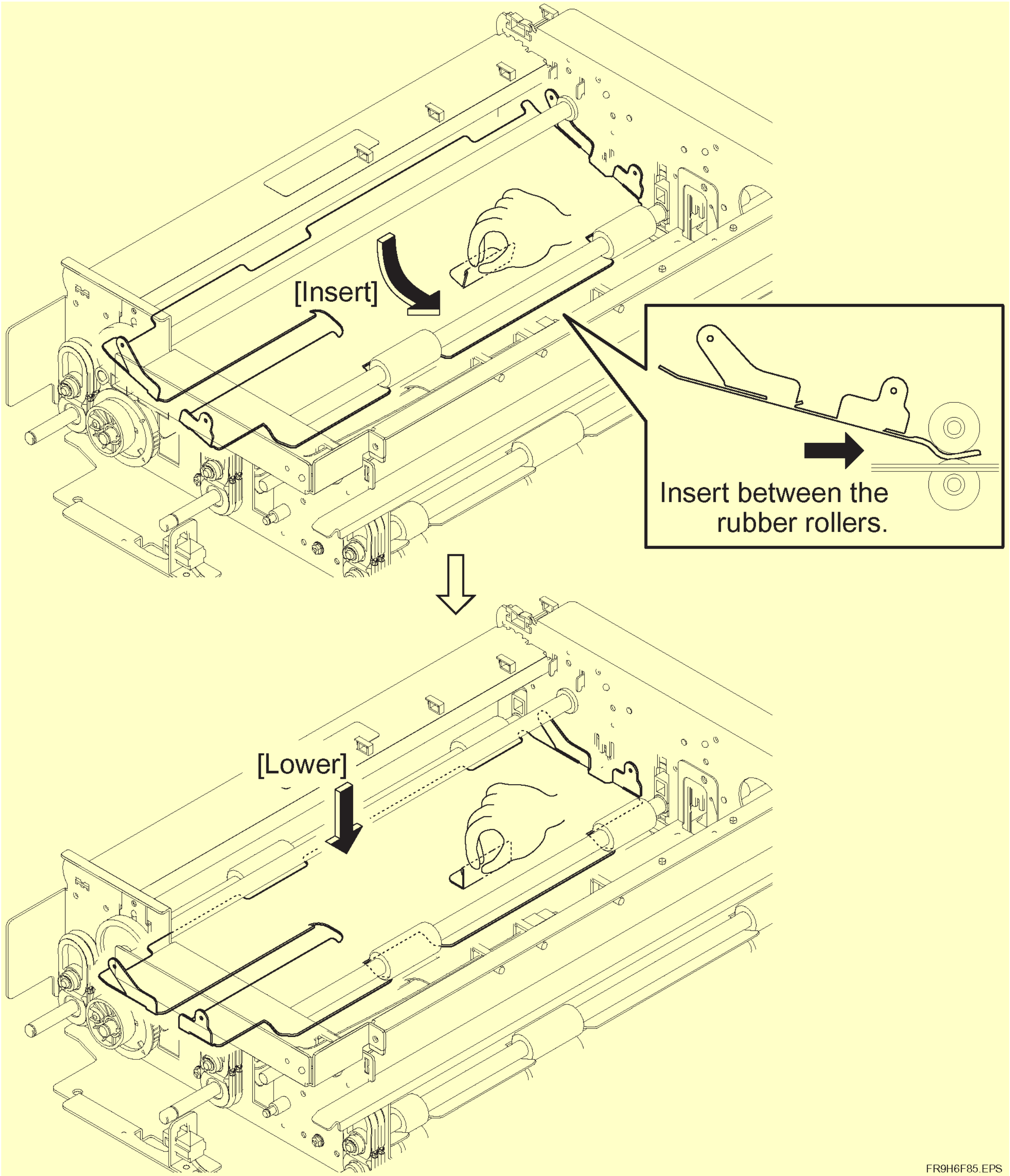
Insert the guide carefully not to allow the guide to tilt laterally. If the guide is tilted, it might get caught with the side plate and cannot be installed.


Half punch
[Insert]
Half punch
Mount on the rubber rollers.
FR9H6F84.EPS

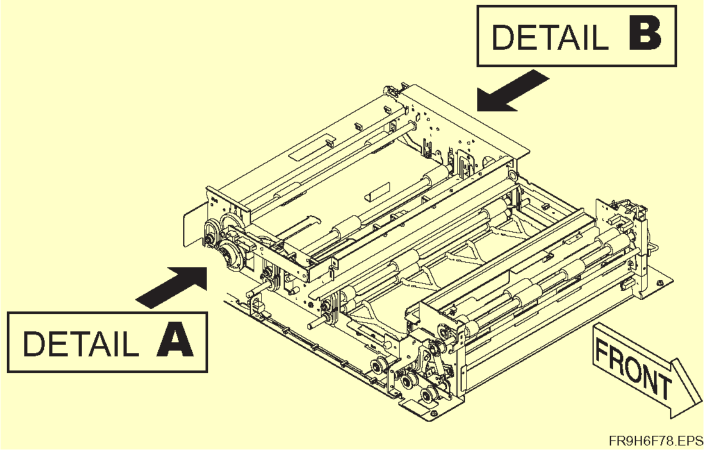
2. **Insert the tip of the guide between the rods of the rubber rollers and lower the rear of the guide.**

◆ NOTE ◆

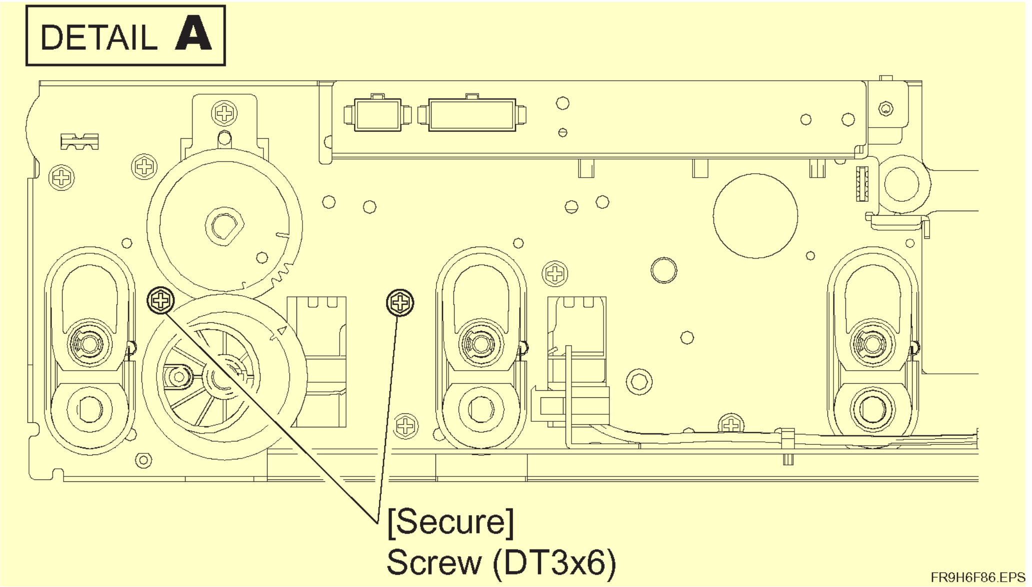
Move the guide carefully not to allow the guide to tilt laterally. If the guide is tilted, it might get caught with the side plate and cannot be installed.


[Insert]
Insert between the rubber rollers.
[Lower]
FR9H6F85.EPS

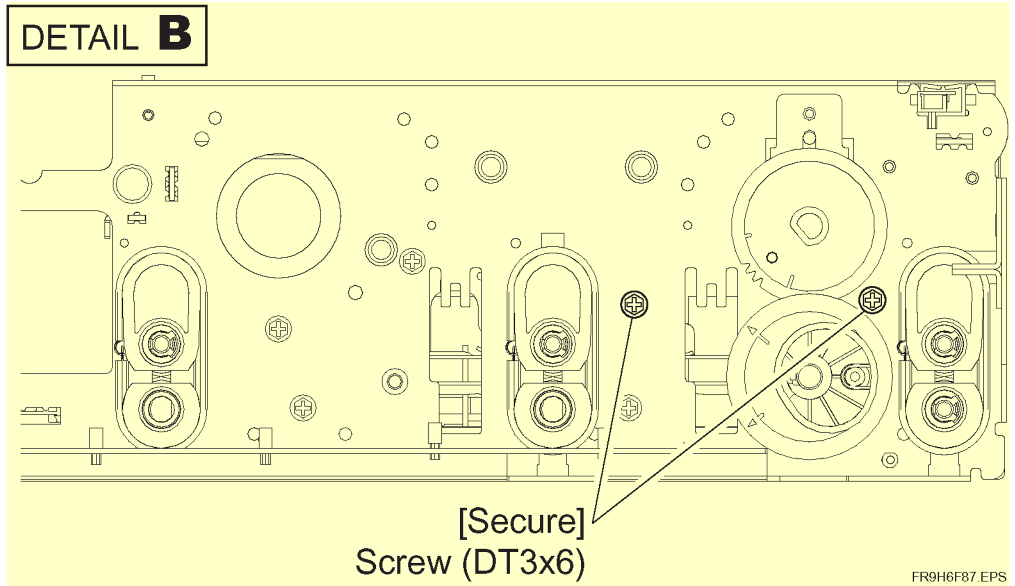
3. **Carry out the operations in the steps 4 and 5 from the direction indicated by the arrow in the figure below.**


DETAIL B
DETAIL A
FRONT
FR9H6F78.EPS

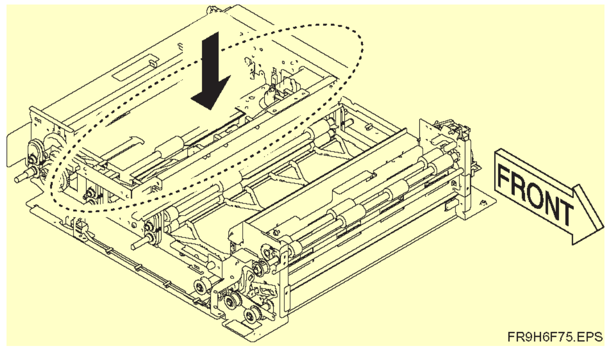
4. **Attach the screws.**


DETAIL A
[Secure]
Screw (DT3x6)
FR9H6F86.EPS

5. **Attach the screws.**


DETAIL B
[Secure]
Screw (DT3x6)
FR9H6F87.EPS

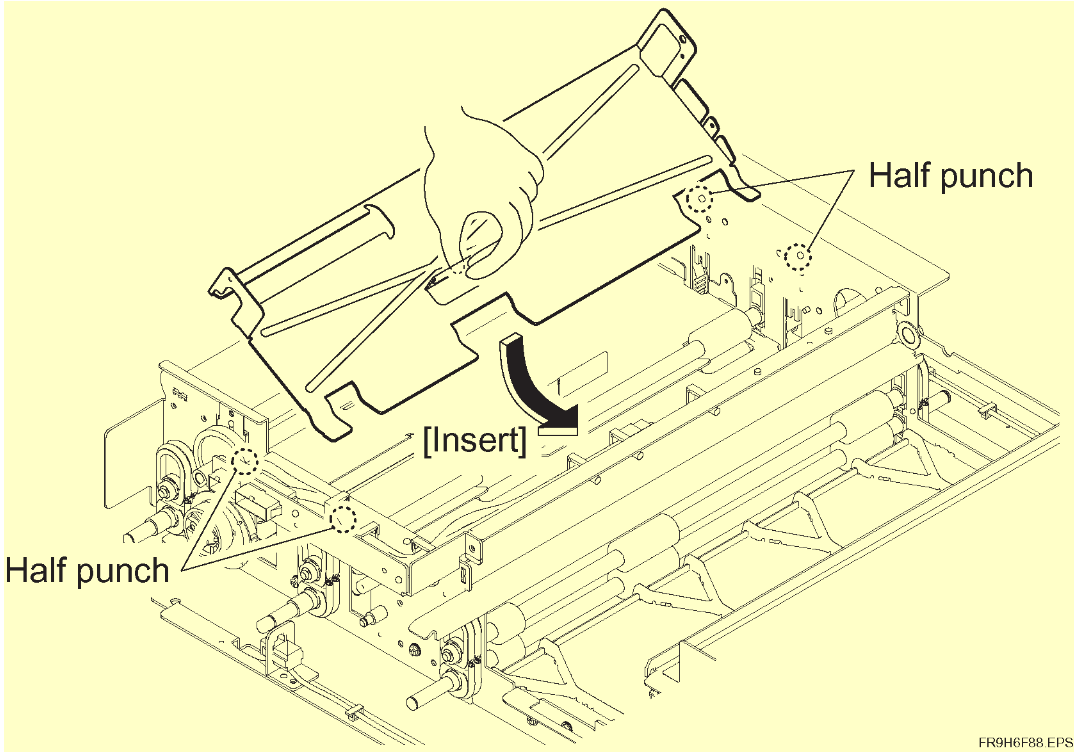
6. **Carry out the operations in the steps 7 and 8 from the direction indicated by the arrow in the figure below.**


FRONT
FR9H6F75.EPS

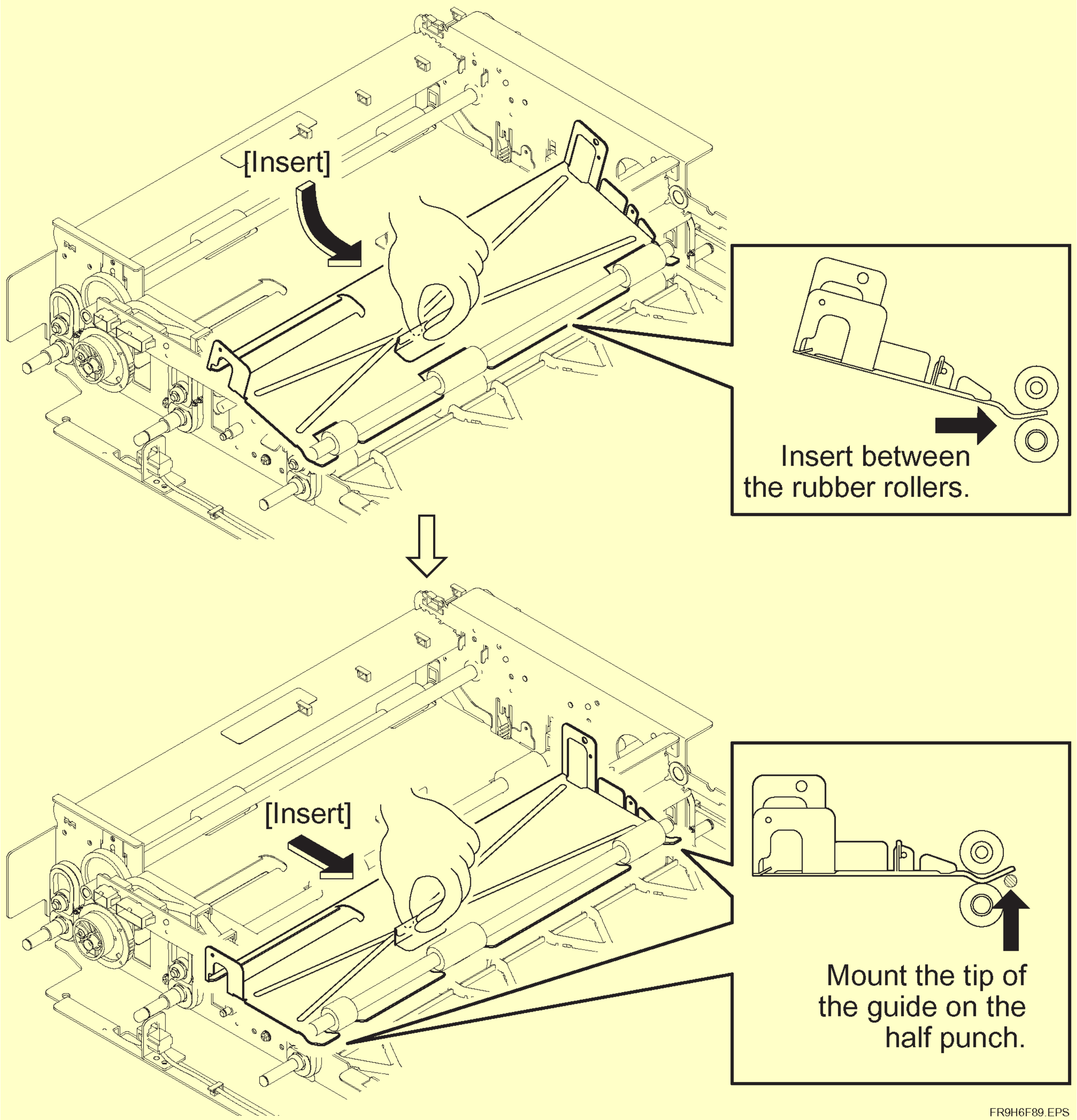
7. **Insert the guide while keeping clear of the half punches in the side plate.**

◆ NOTE ◆

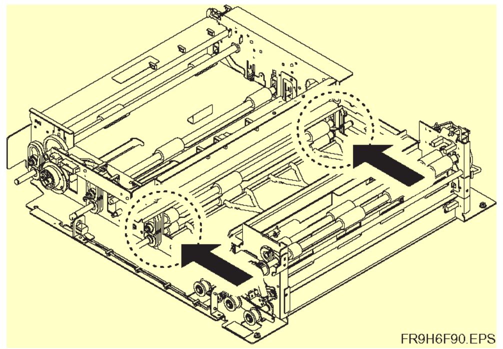
Insert the guide carefully not to allow the guide to tilt laterally. If the guide is tilted, it might get caught with the side plate and cannot be installed.


Half punch
[Insert]
Half punch
FR9H6F88.EPS

8. **Insert the tip of the guide between the rods of the rubber rollers, and lead the tip of the guide onto the half punch in the side plate.**


[Insert]
Insert between the rubber rollers.
[Insert]
Mount the tip of the guide on the half punch.
FR9H6F89.EPS

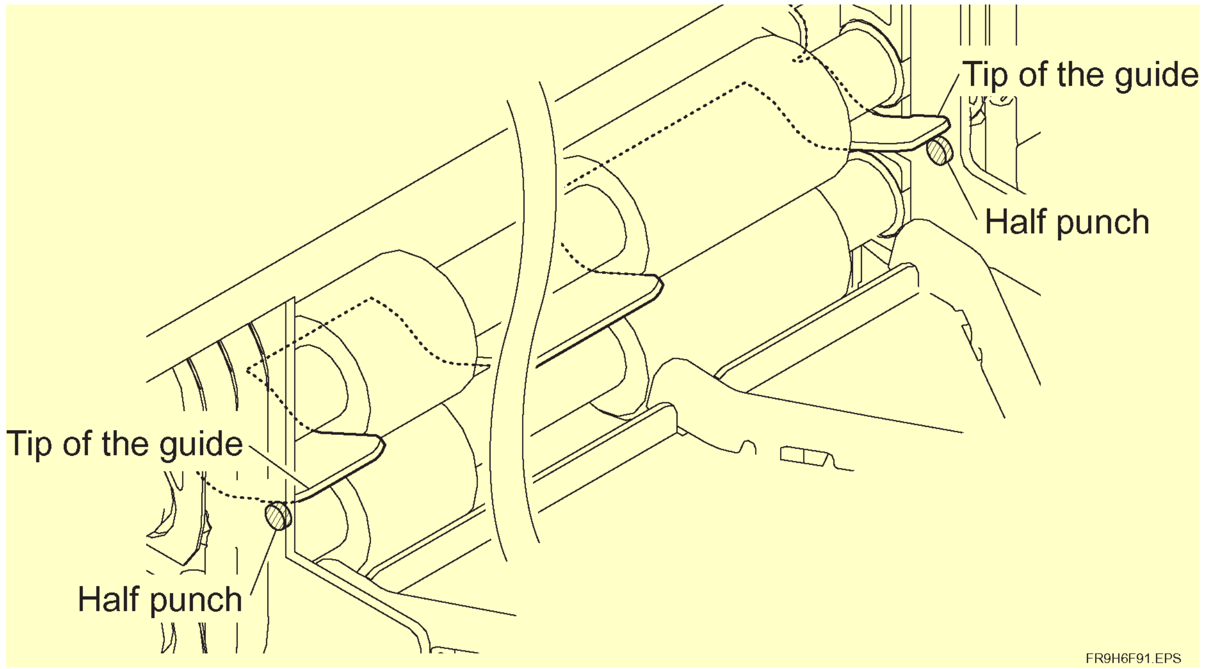
9. **Carry out the operations in the step 10 from the direction indicated by the arrow in the figure below.**


FR9H6F90.EPS

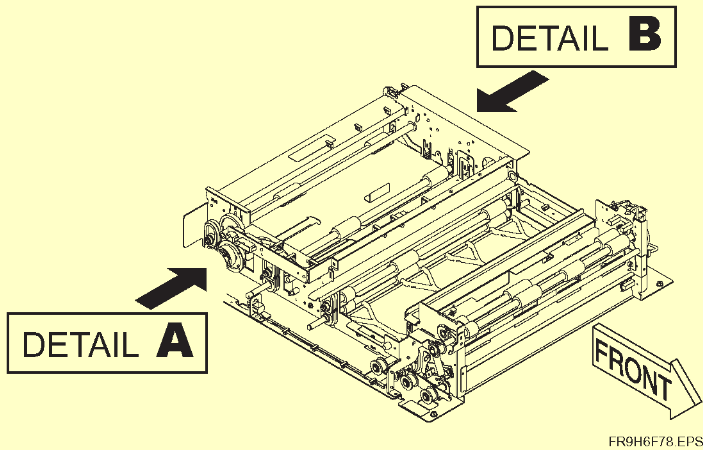
10. **Check to ensure that the tip of the guide is mounted on the half punch.**

◆ NOTE ◆

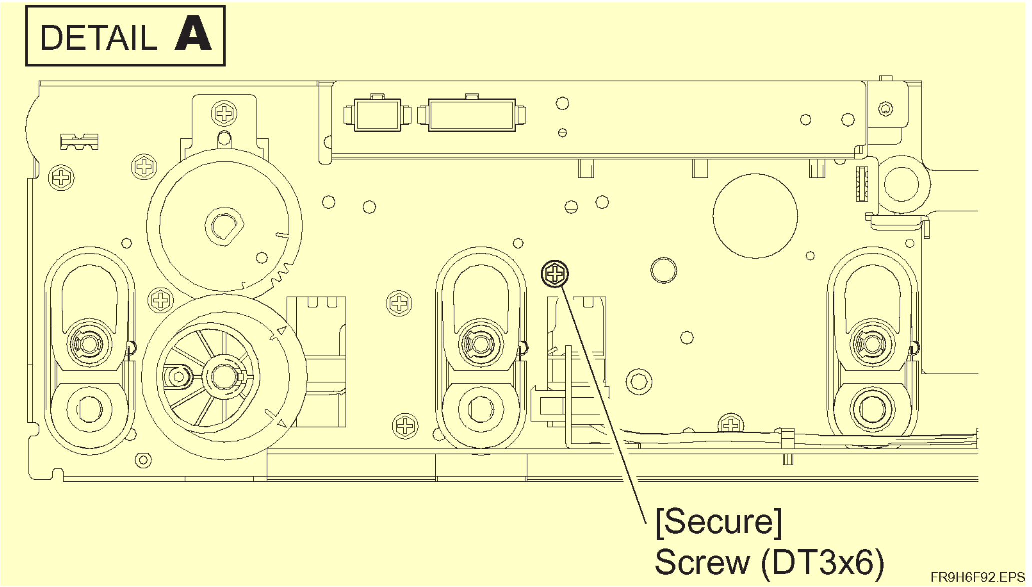
If the tip of the guide is not mounted on the half punch in the side plate, it might cause the IP to get jammed.


Tip of the guide
Half punch
Tip of the guide
Half punch
FR9H6F91.EPS

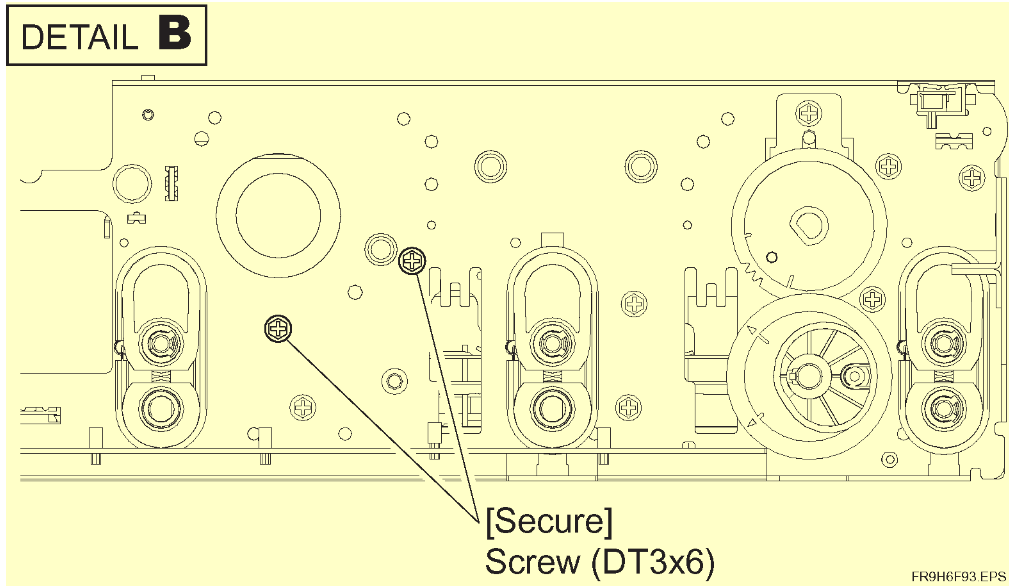
11. **Carry out the operations in the steps 12 and 13 from the direction indicated by the arrow in the figure below.**


DETAIL B
DETAIL A
FRONT
FR9H6F78.EPS

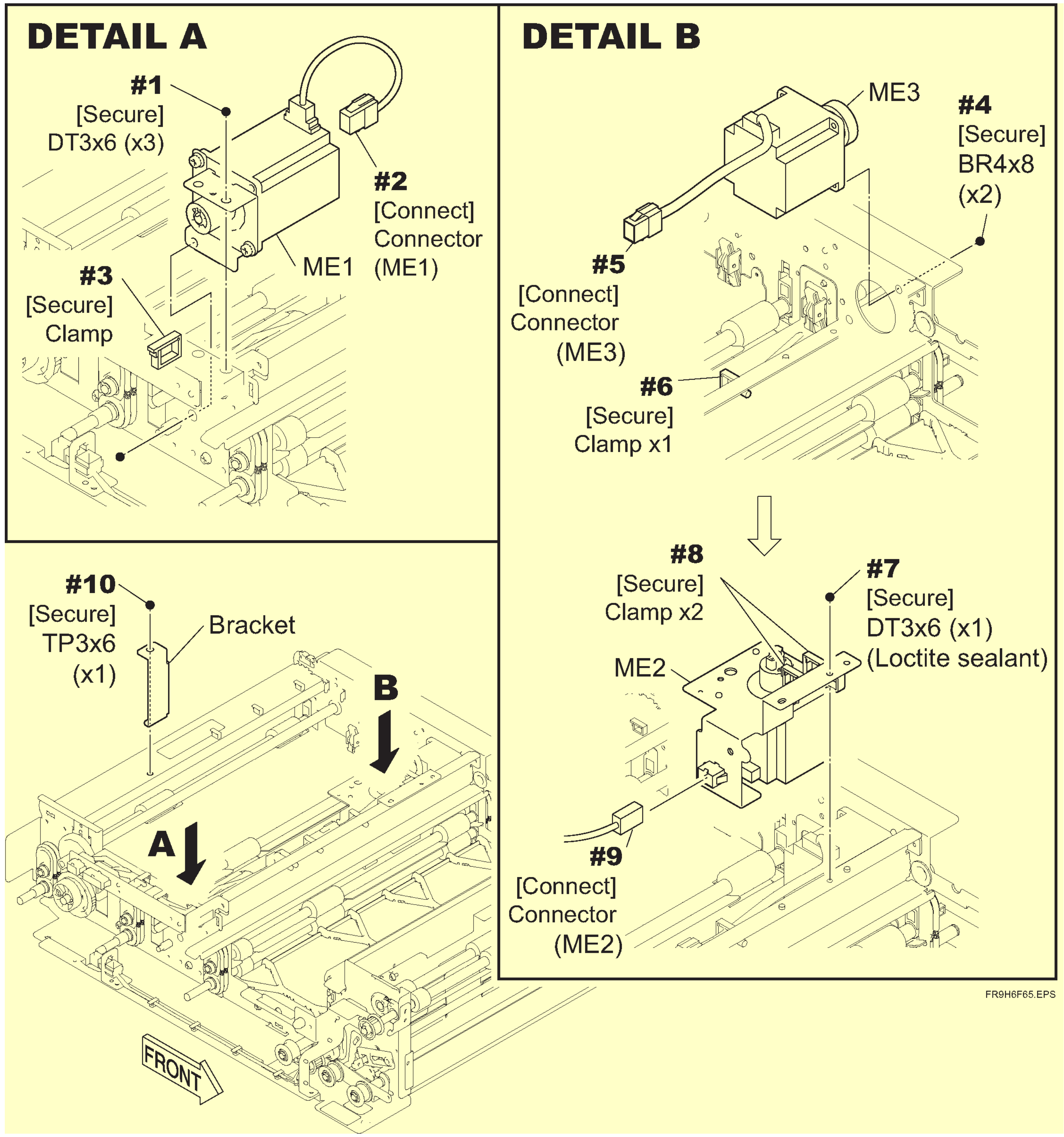
12. **Attach the screw.**


DETAIL A
[Secure]
Screw (DT3x6)
FR9H6F92.EPS

13. **Attach the screws.**


DETAIL B
[Secure]
Screw (DT3x6)
FR9H6F93.EPS

14. **Reinstall the motors.**

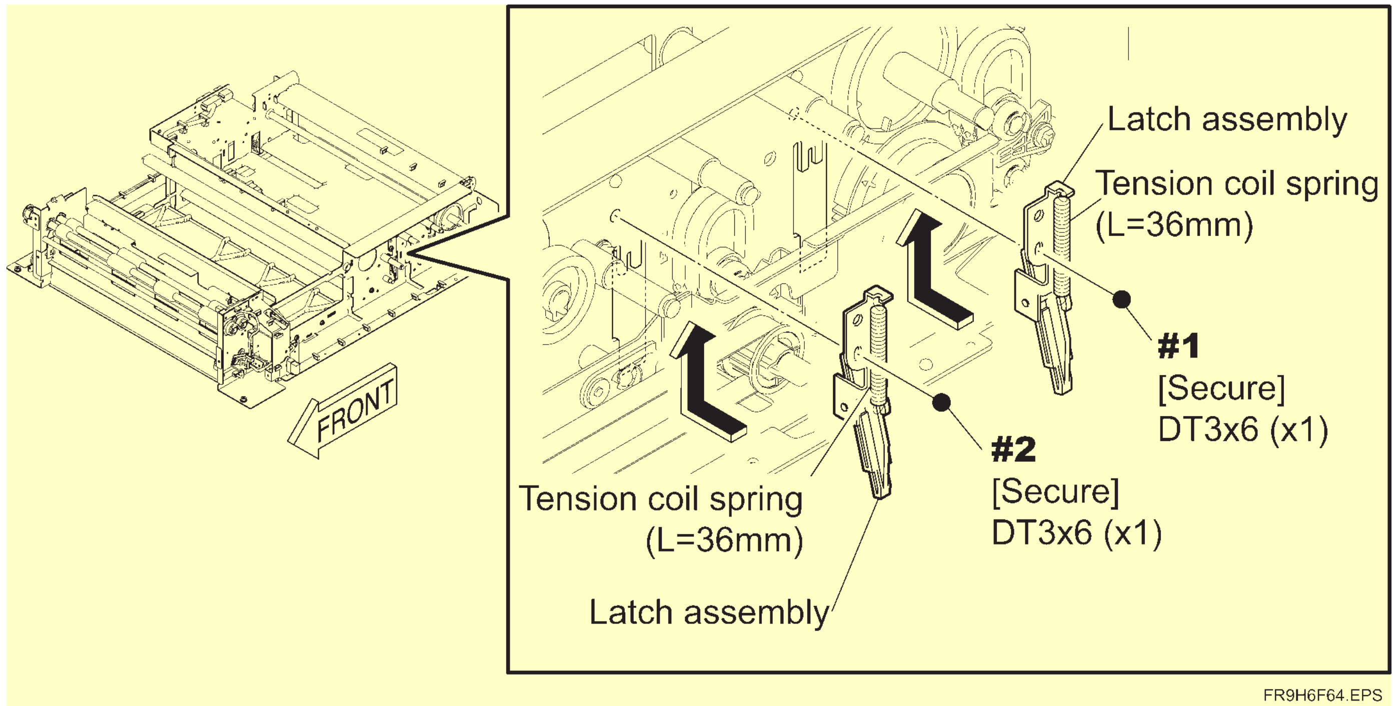

DETAIL A
#1
[Secure]
DT3x6 (x3)
#2
[Connect]
Connector
(ME1)
ME1
#3
[Secure]
Clamp
DETAIL B
ME3
#4
[Secure]
BR4x8
(x2)
#5
[Connect]
Connector
(ME3)
#6
[Secure]
Clamp x1
#8
[Secure]
Clamp x2
#7
[Secure]
DT3x6 (x1)
(Loctite sealant)
ME2
#9
[Connect]
Connector
(ME2)
#10
[Secure]
TP3x6
(x1)
Bracket
B
A
FRONT
FR9H6F65.EPS

2Y ☞ {PM:13.9}

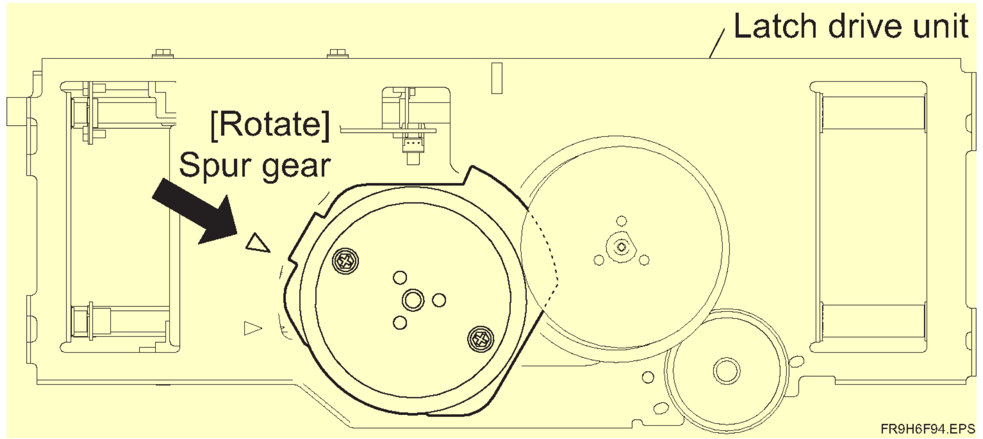
13.9 Reinstalling the Latch Drive Unit

2Y

1. Reinstall the latch assembly (reference side).

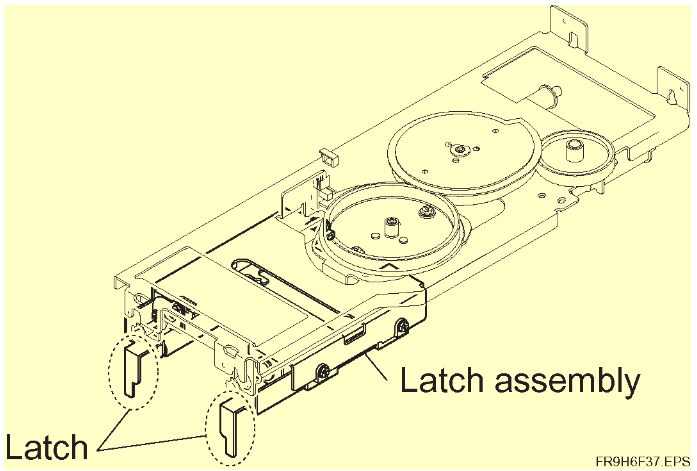

FRONT
Latch assembly
Tension coil spring
(L=36mm)
#1
[Secure]
DT3x6 (x1)
#2
[Secure]
DT3x6 (x1)
Tension coil spring
(L=36mm)
Latch assembly
FR9H6F64.EPS

2. Rotate the spur gear of the latch drive unit to the position indicated by the arrow.

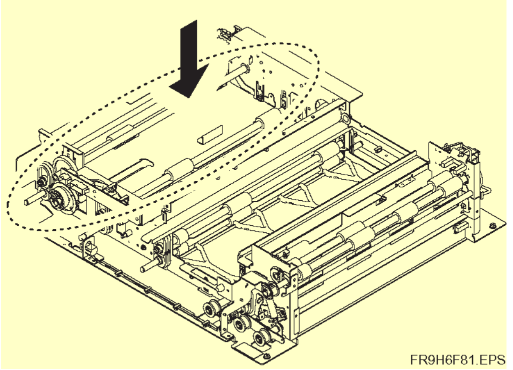

Latch drive unit
[Rotate]
Spur gear
FR9H6F94.EPS

◆ ***NOTE*** ◆

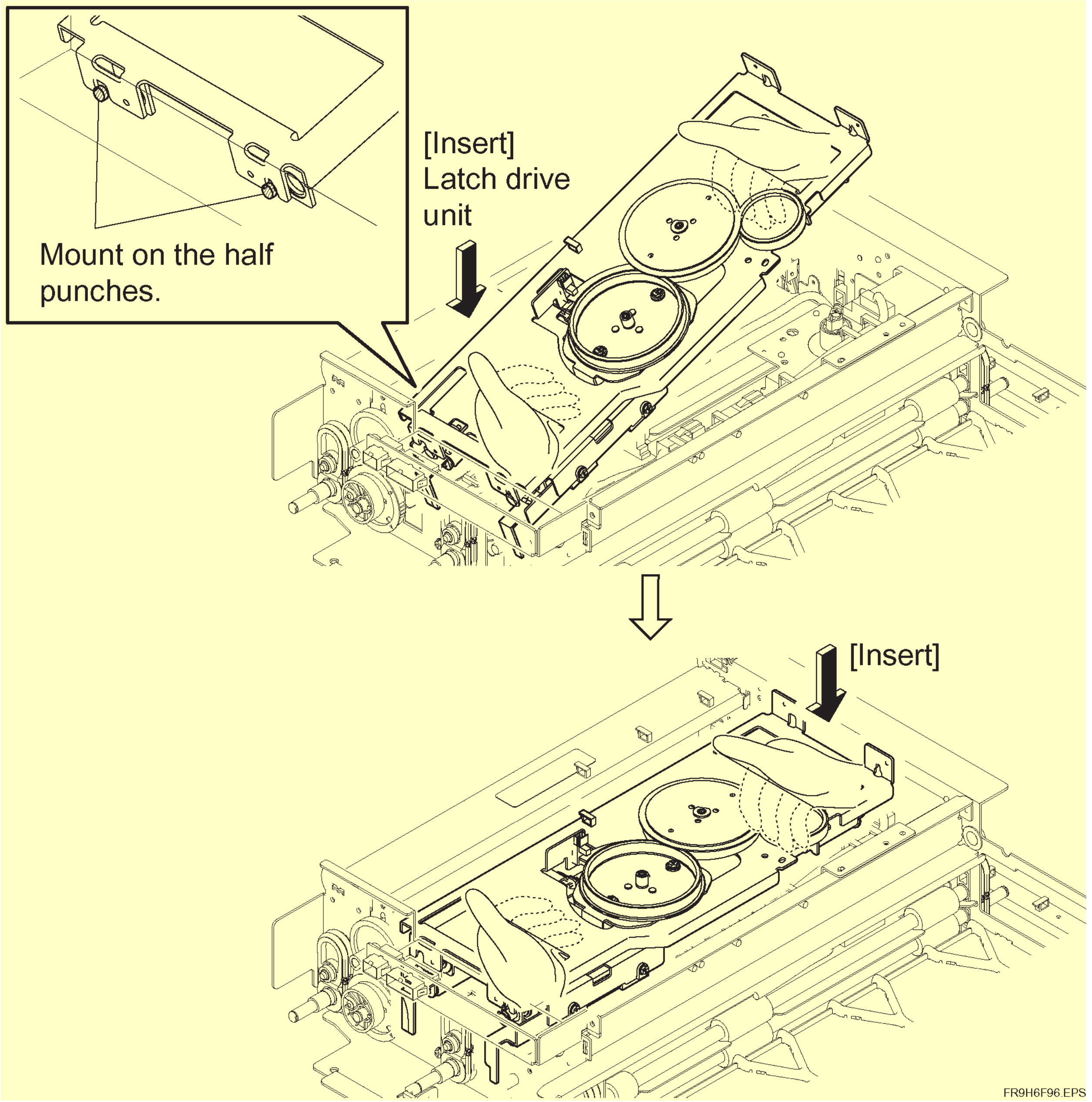
When the spur gear is rotated, the latch assembly moves inward. Unless the spur gear has moved to a specified position, the latch of the latch assembly might get damaged when the latch drive unit is removed.


Latch assembly
Latch
FR9H6F37.EPS

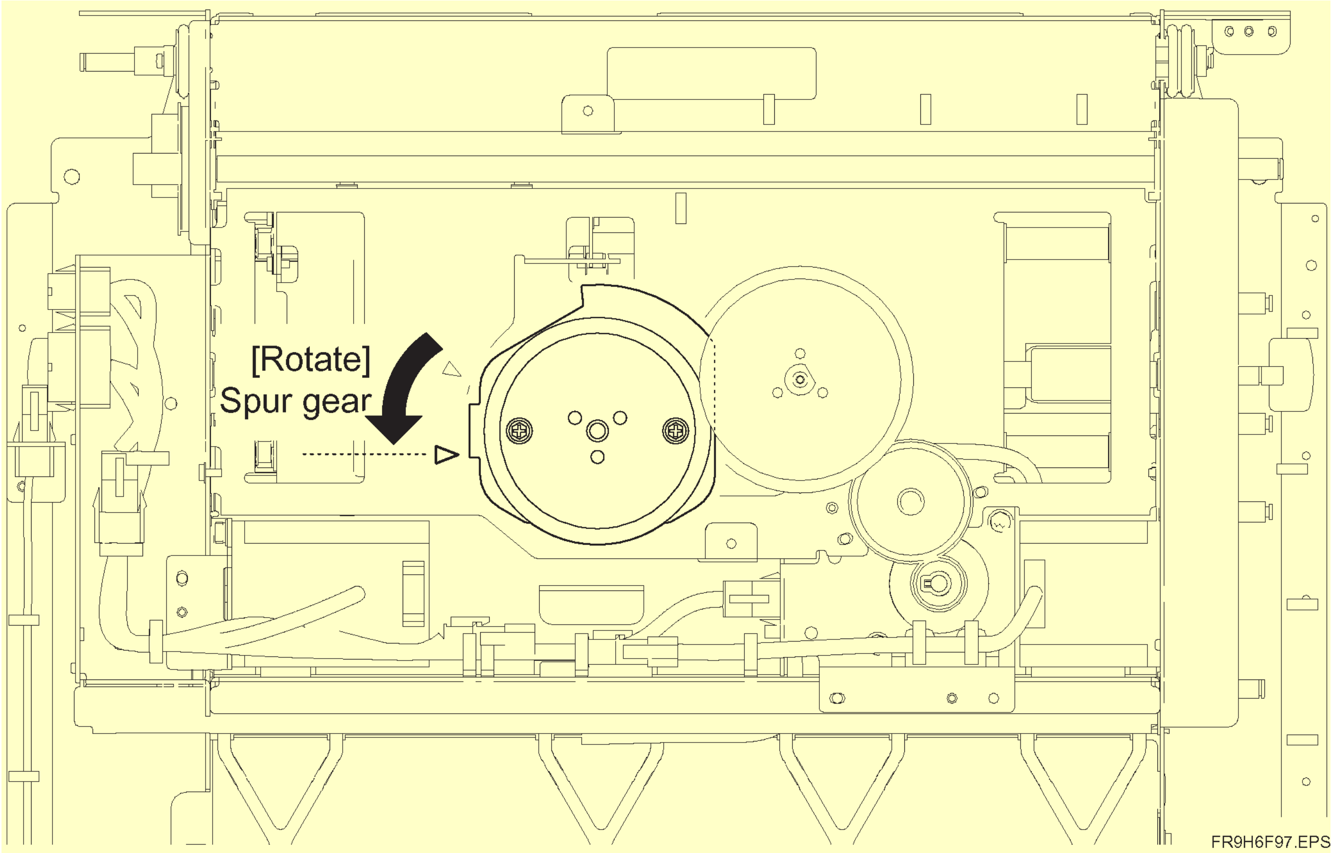
3. **Carry out the operations in the steps 4 to 6 from the direction indicated by the arrow in the figure below.**


FR9H6F81.EPS

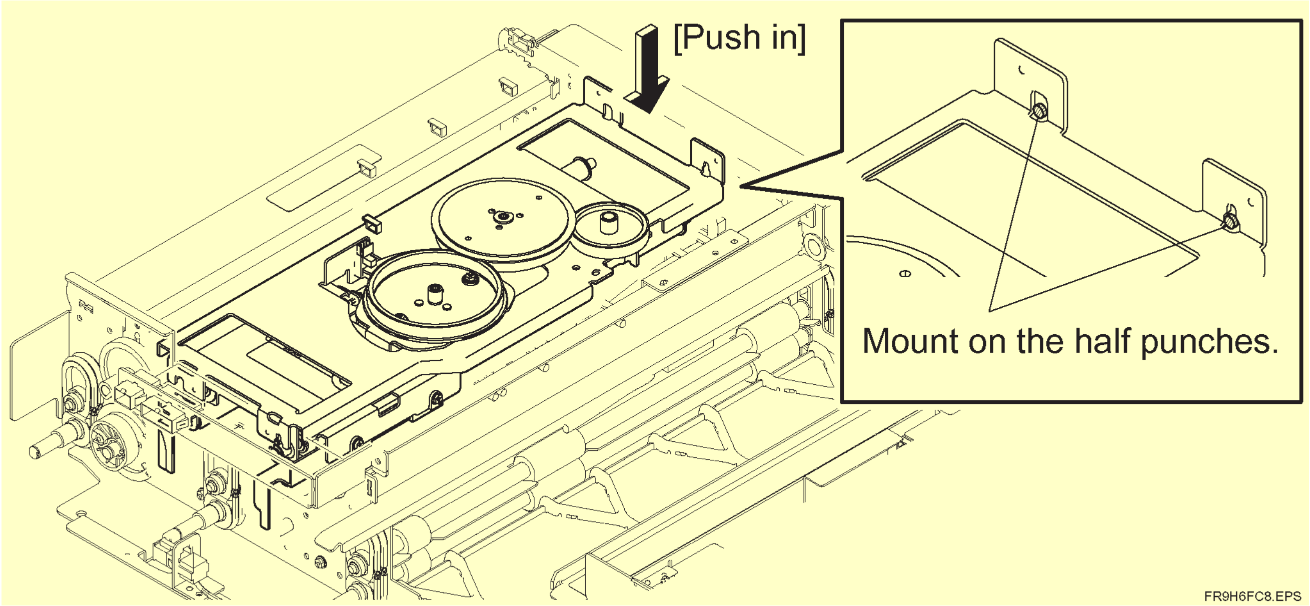
4. **Reinstall the latch drive unit.**


Mount on the half punches.
[Insert]
Latch drive unit
[Insert]
FR9H6F96.EPS

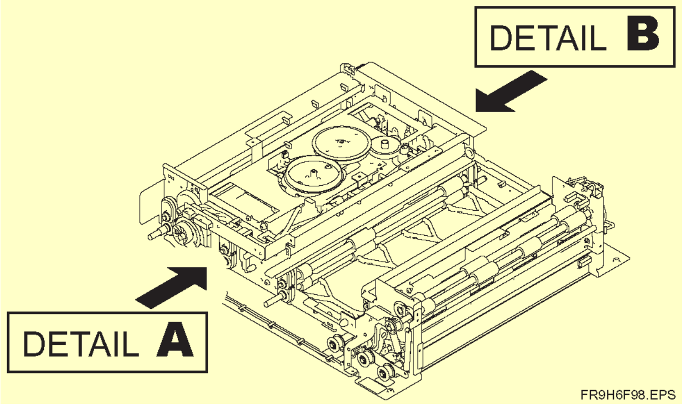
5. **Rotate the spur gear of the latch drive unit fully counterclockwise.**


[Rotate]
Spur gear
FR9H6F97.EPS

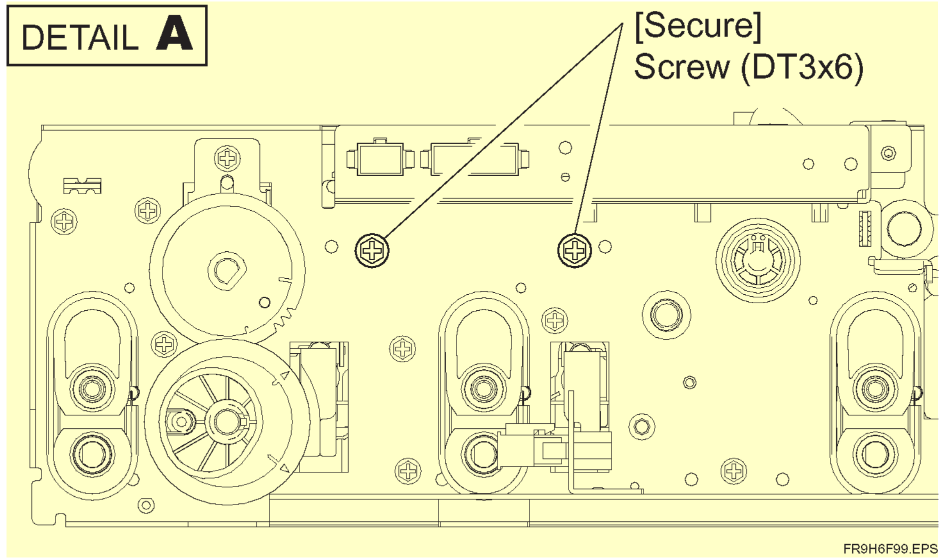
6. **Push in the latch drive unit to its retained position.**


[Push in]
Mount on the half punches.
FR9H6FC8.EPS

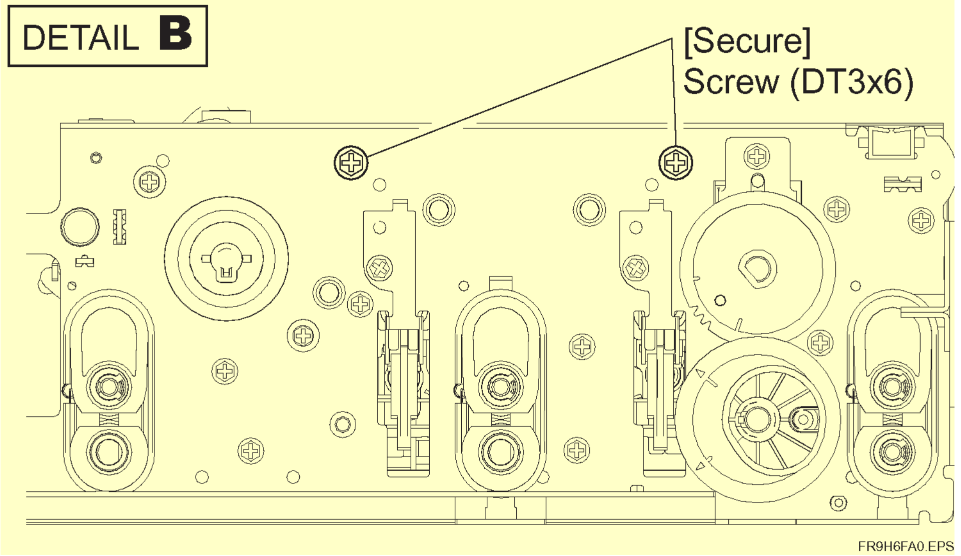
7. Carry out the operations in the steps 8 and 9 from the direction indicated by the arrow in the figure below.


DETAIL B
DETAIL A
FR9H6F98.EPS

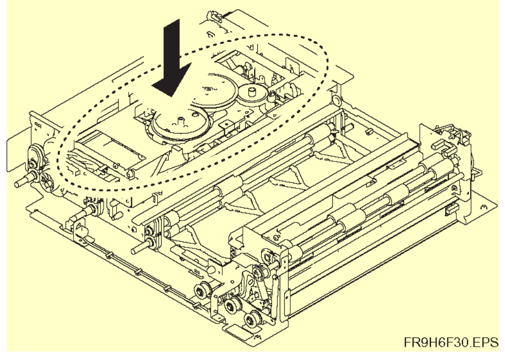
8. Attach the screws.


DETAIL A
[Secure]
Screw (DT3x6)
FR9H6F99.EPS

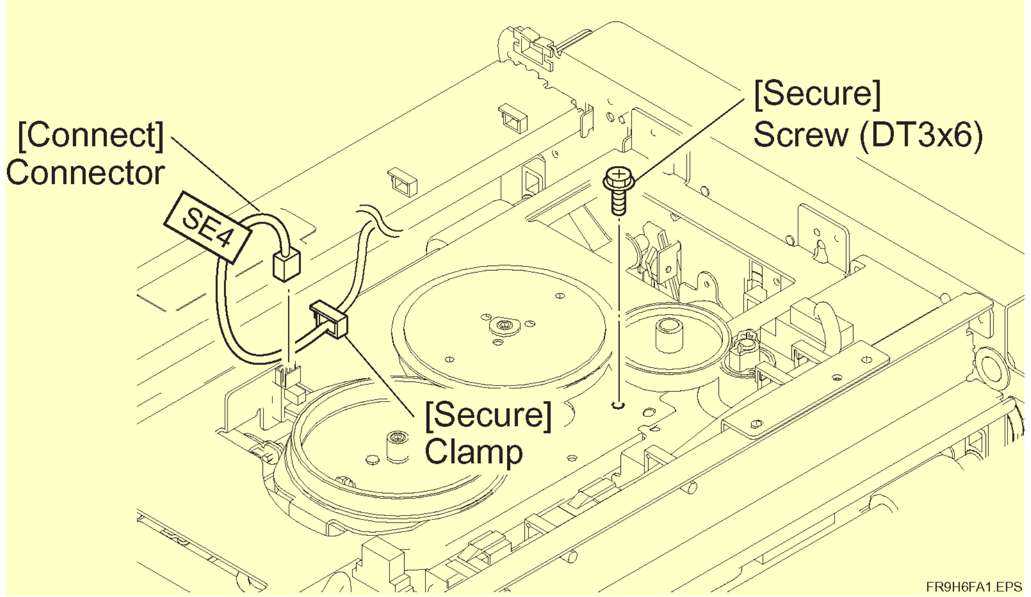
9. Attach the screws.


DETAIL B
[Secure]
Screw (DT3x6)
FR9H6FA0.EPS

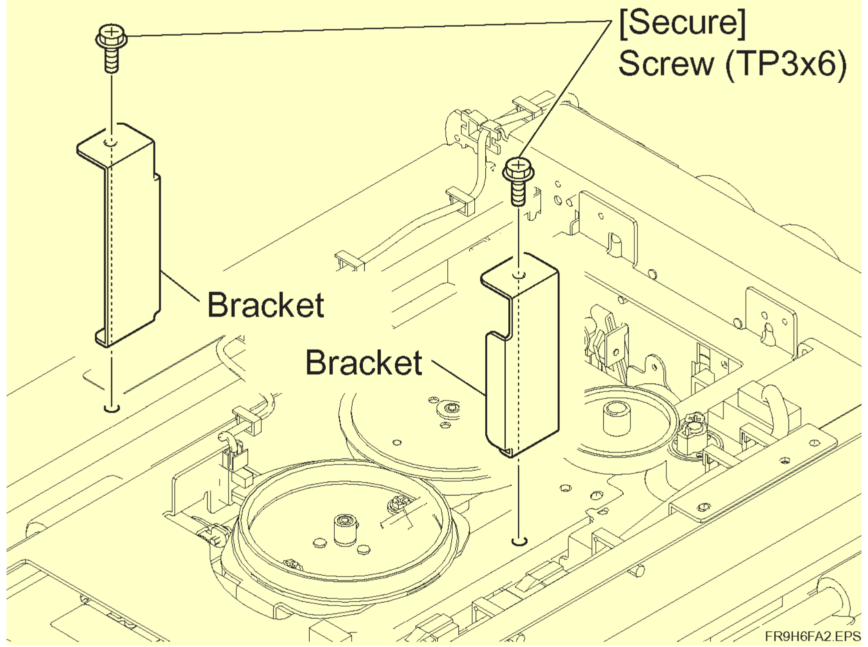
10. Carry out the operations in the steps 11 and 12 from the direction indicated by the arrow in the figure below.


FR9H6F30.EPS

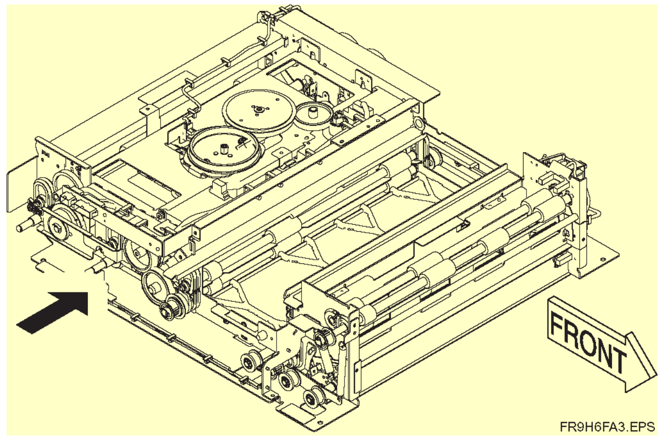
11. Connect the connector and the screw, and secure the clamp.


[Connect]
Connector
SE4
[Secure]
Screw (DT3x6)
[Secure]
Clamp
FR9H6FA1.EPS

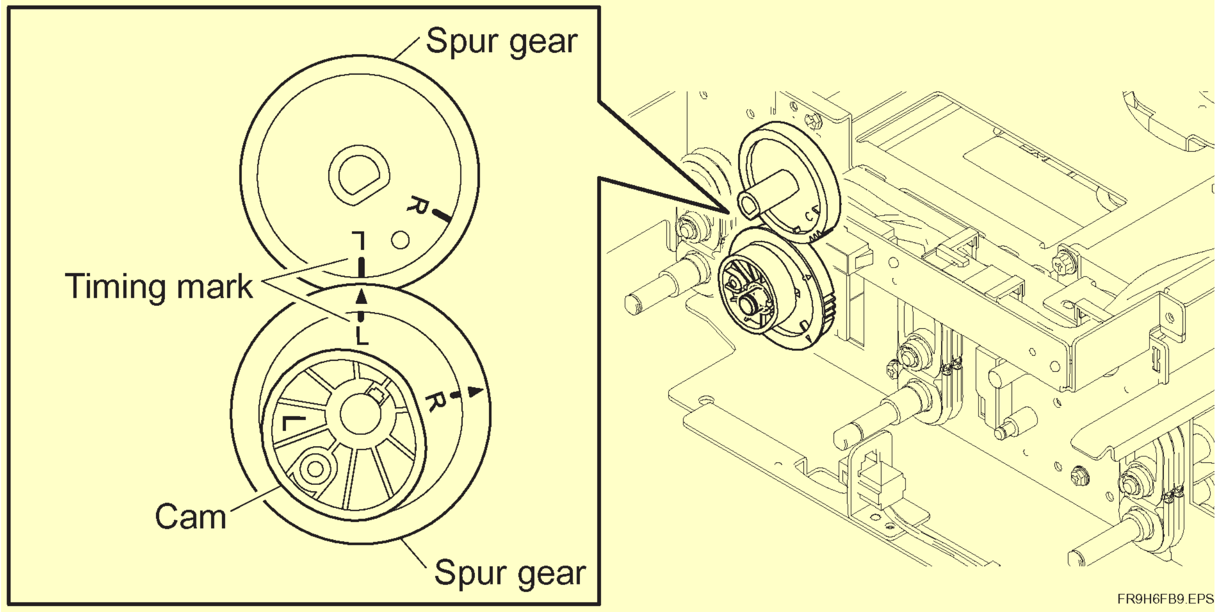
12. Reinstall the bracket.


[Secure]
Screw (TP3x6)
Bracket
Bracket
FR9H6FA2.EPS

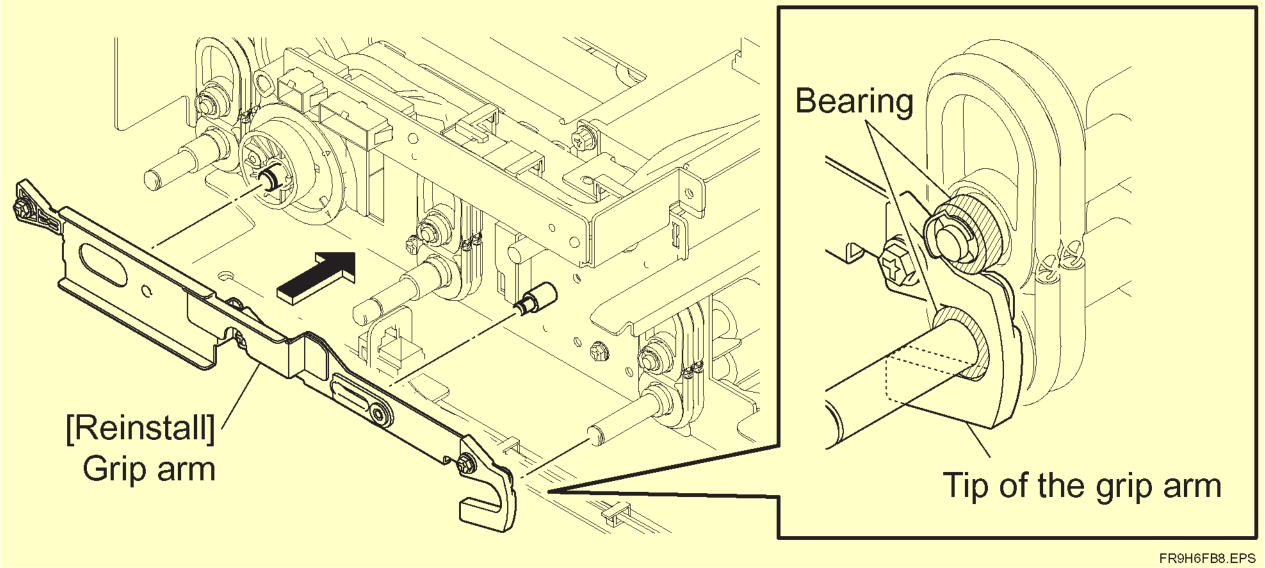
13. **Carry out the operations in the steps 14 to 23 from the direction indicated by the arrow in the figure below.**


FRONT
FR9H6FA3.EPS

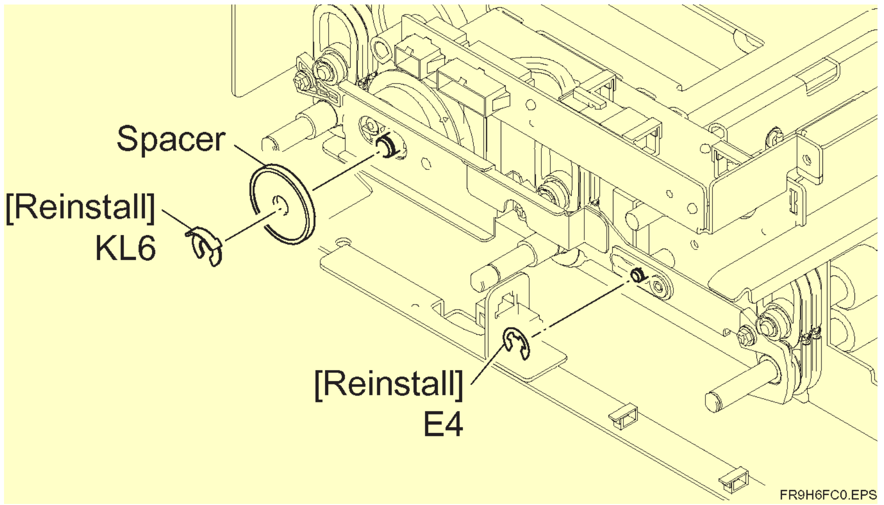
14. **Verify the attachment locations of the cam and the spur gear.**


Spur gear
R
L
Timing mark
L
R
L
Cam
Spur gear
FR9H6FB9.EPS

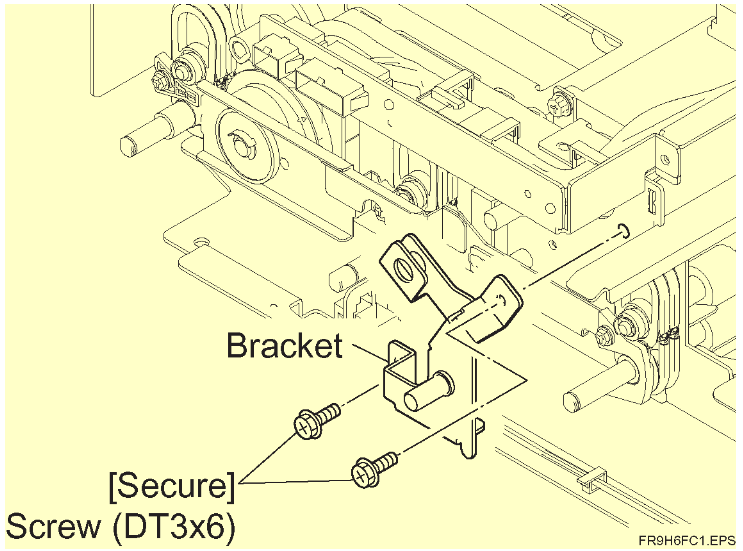
15. **Reinstall the grip arm (opposite reference side).**


[Reinstall]
Grip arm
Bearing
Tip of the grip arm
FR9H6FB8.EPS

16. **Attach the E-ring, spacer, and KL clip.**


Spacer
[Reinstall]
KL6
[Reinstall]
E4
FR9H6FC0.EPS

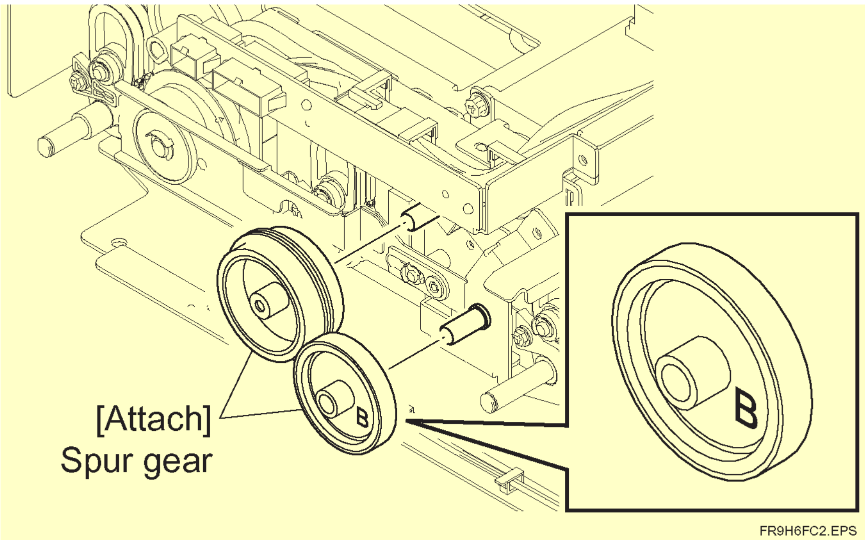
17. **Reinstall the bracket.**


Bracket
[Secure]
Screw (DT3x6)
FR9H6FC1.EPS

18. **Attach the spur gear.**

◆ *NOTE* ◆

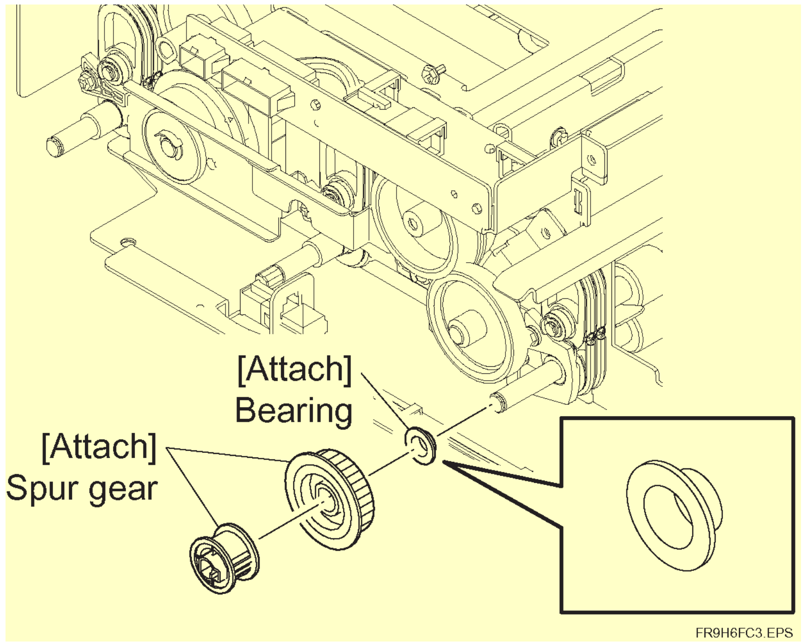
Attach the spur gear in the orientation where the engraving “B” is visible.


[Attach]
Spur gear
B
FR9H6FC2.EPS

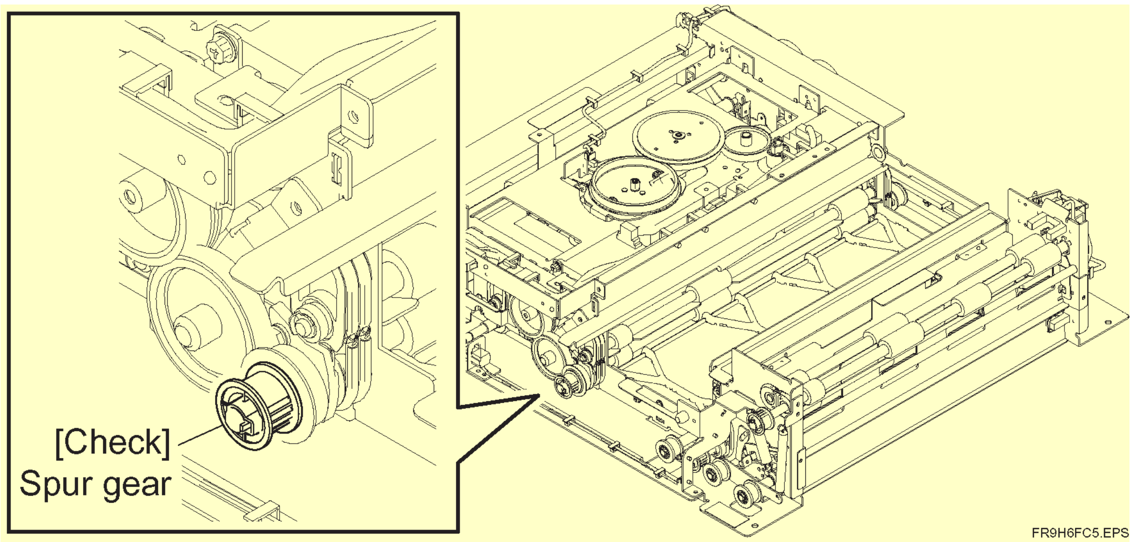
19. **Attach the bearing and the spur gear.**

◆ *NOTE* ◆

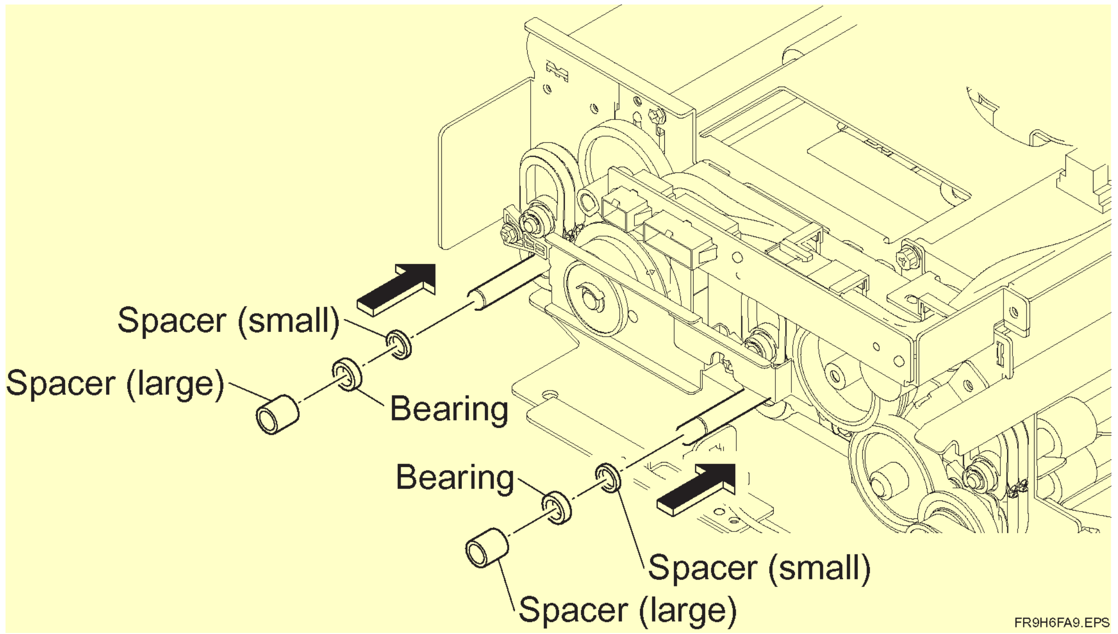
Pay attention to the orientation of attaching the bearing.


[Attach]
Bearing
[Attach]
Spur gear
FR9H6FC3.EPS

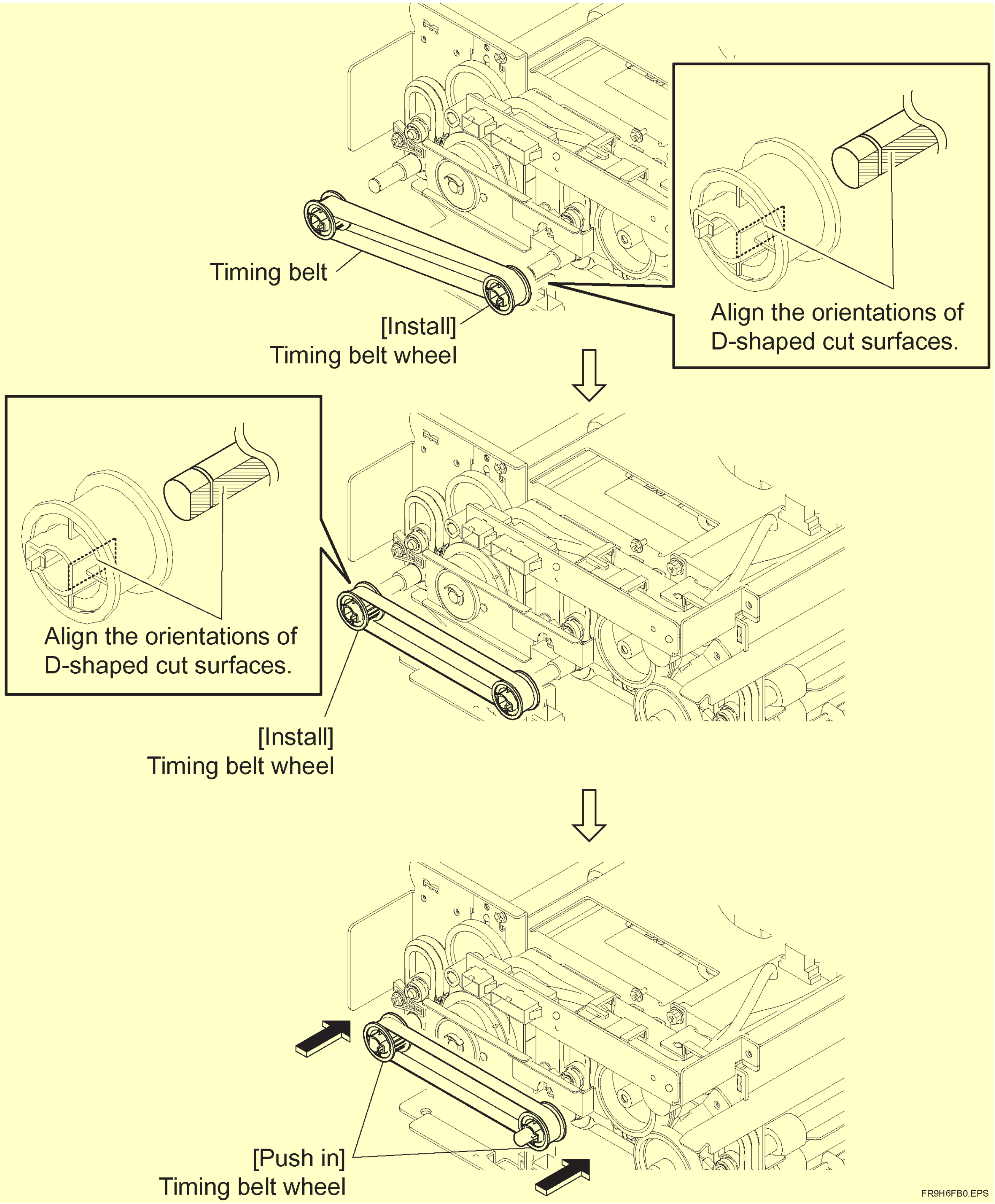
20. **Check to ensure that the latch of the spur gear gets caught in the groove of the rod and does not come off.**


[Check]
Spur gear
FR9H6FC5.EPS

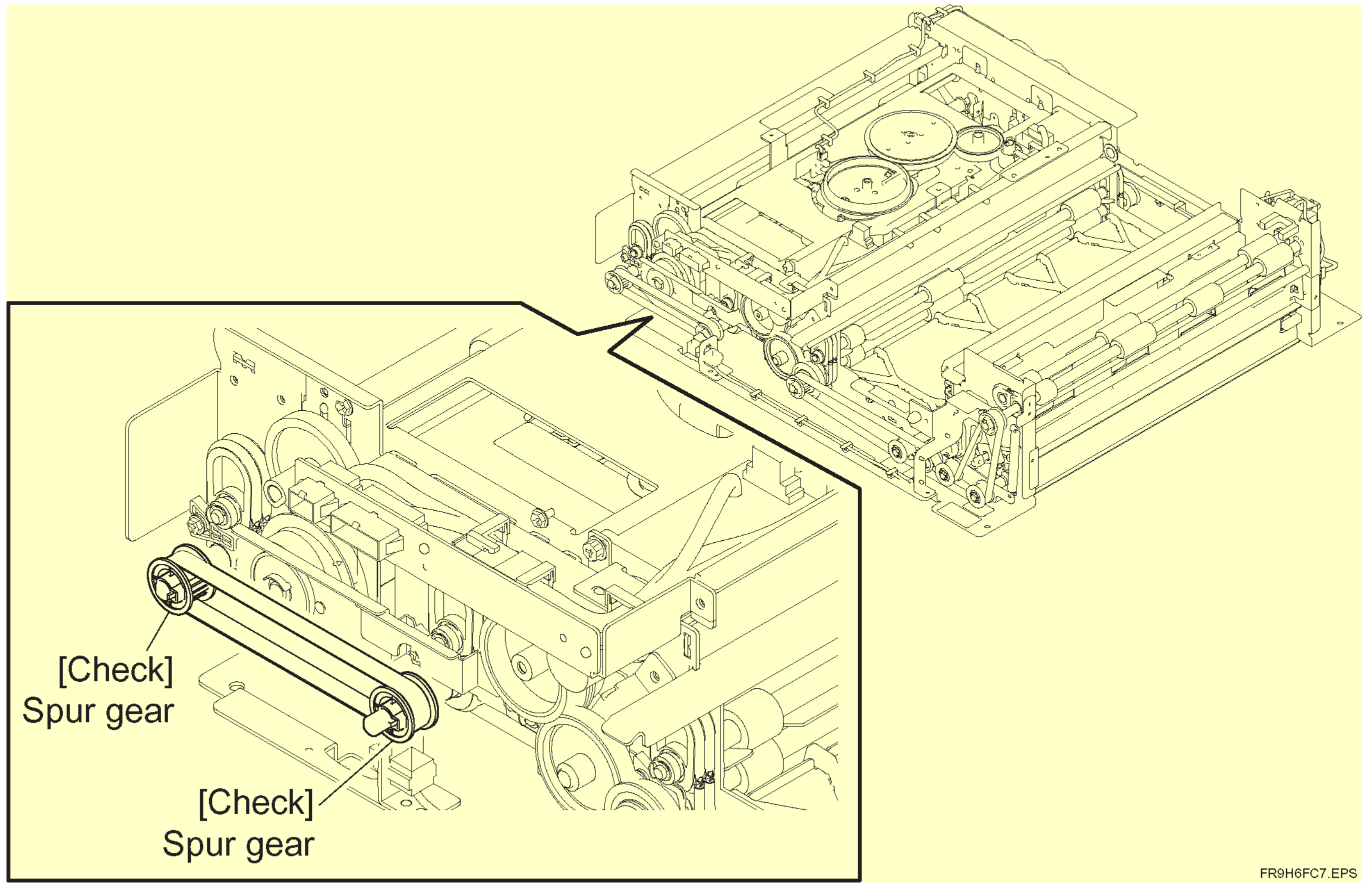
21. **Attach the spacers and bearings.**


Spacer (small)
Spacer (large)
Bearing
Bearing
Spacer (small)
Spacer (large)
FR9H6FA9.EPS

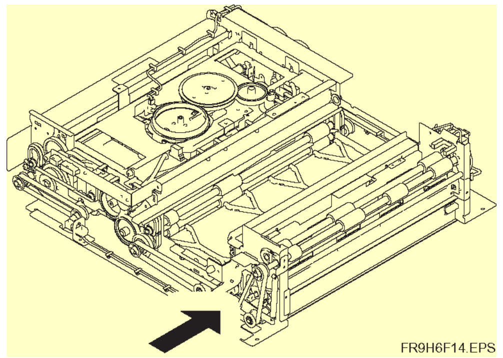
22. **Reinstall the timing belt and the timing belt wheels.**


Timing belt
[Install]
Timing belt wheel
Align the orientations of
D-shaped cut surfaces.
Align the orientations of
D-shaped cut surfaces.
[Install]
Timing belt wheel
[Push in]
Timing belt wheel
FR9H6FB0.EPS

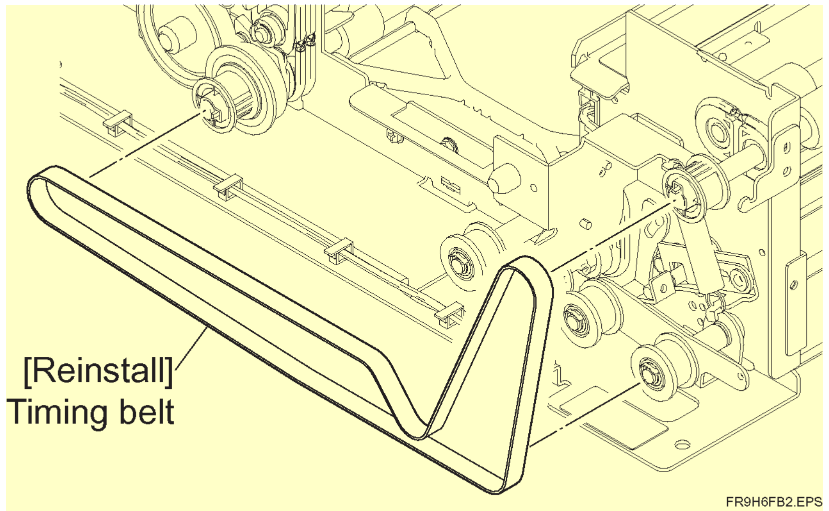
23. **Check to ensure that the latch of the spur gear gets caught in the groove of the rod and does not come off.**


[Check]
Spur gear
[Check]
Spur gear
FR9H6FC7.EPS

24. **Carry out the operations in the steps 25 to 27 from the direction indicated by the arrow in the figure below.**

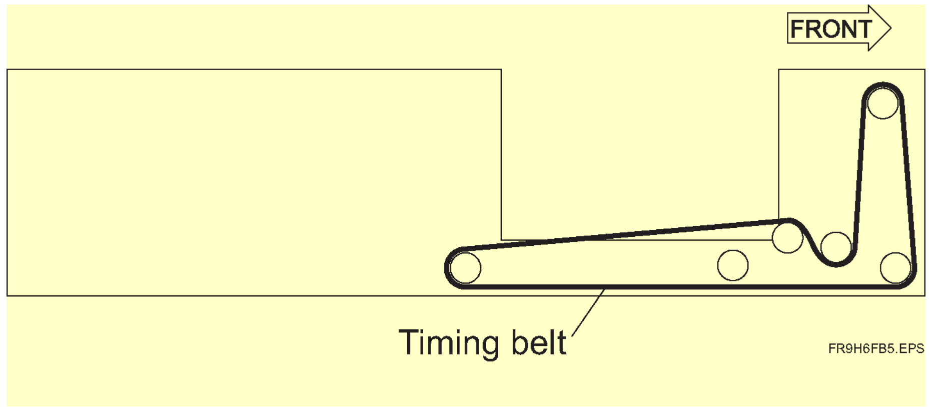

FR9H6F14.EPS

25. **Reinstall the timing belt.**

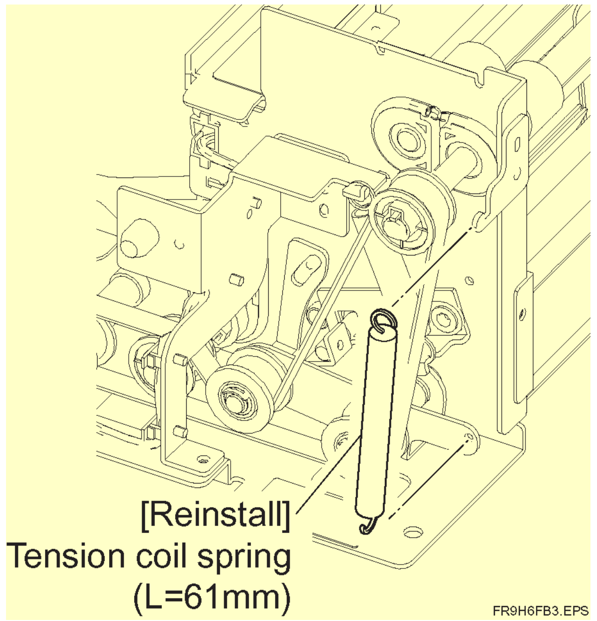

[Reinstall]
Timing belt
FR9H6FB2.EPS

◇ *REFERENCE* ◇

The timing belt (B) is mounted in the passage indicated in the figure below.


FRONT
Timing belt
FR9H6FB5.EPS

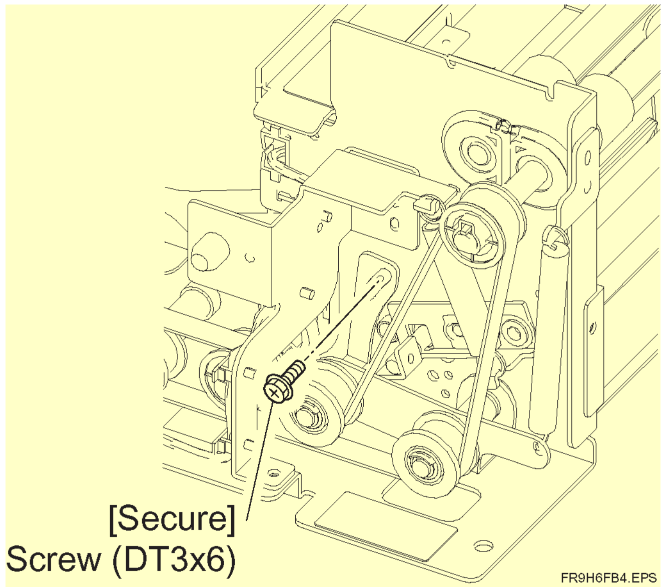
26. **Reinstall the tension coil spring.**


[Reinstall]
Tension coil spring
(L=61mm)
FR9H6FB3.EPS

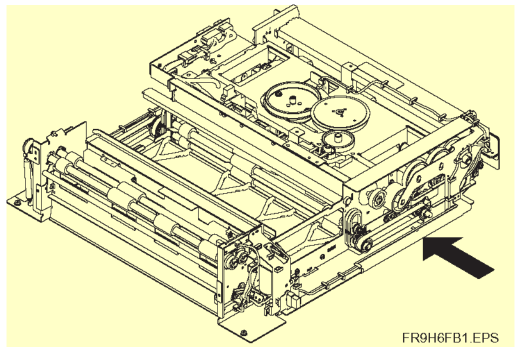
27. **Attach the screw.**

◆ ***NOTE*** ◆

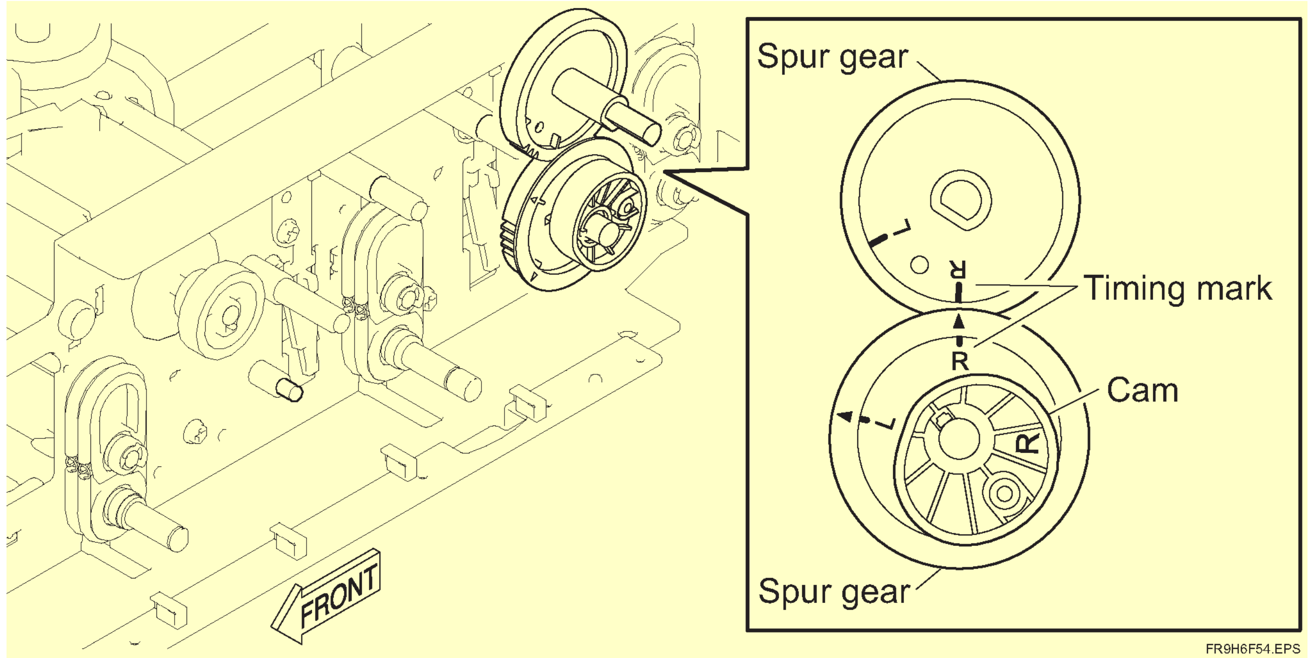
Tension of the timing belt is defined by the tension coil spring. When attaching the retaining screw of the tensioner, do not apply excessive force to the tensioner by holding it or by other means.


[Secure]
Screw (DT3x6)
FR9H6FB4.EPS

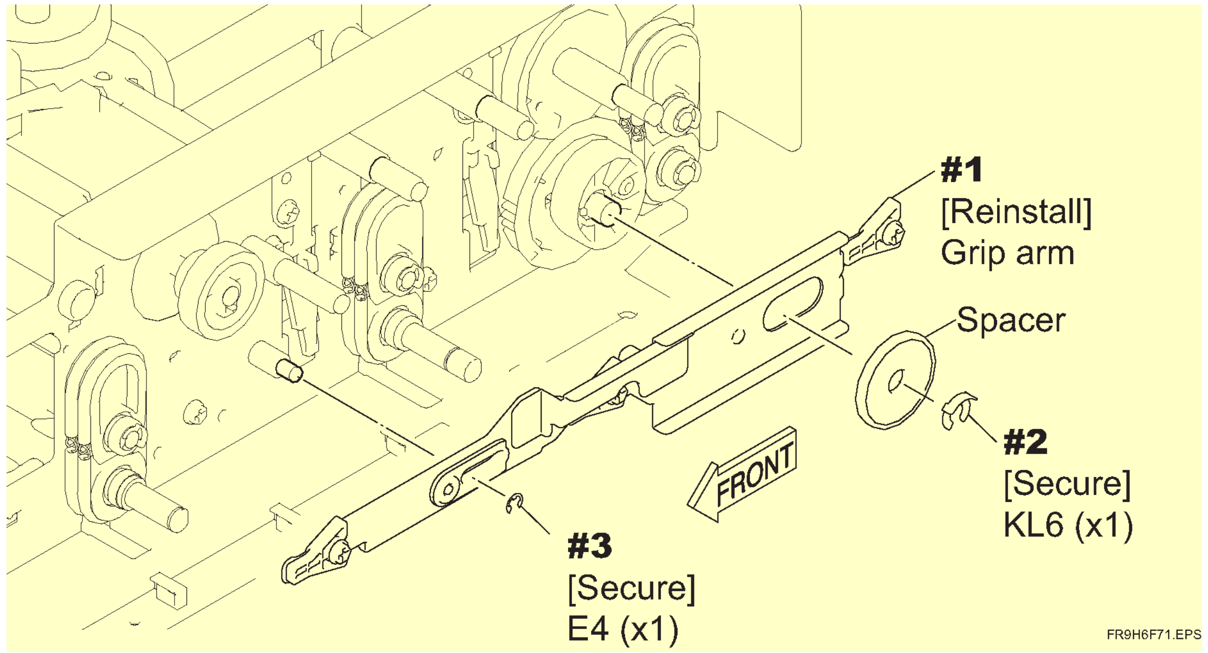
28. **Carry out the operations in the steps 29 to 35 from the direction indicated by the arrow in the figure below.**


FR9H6FB1.EPS

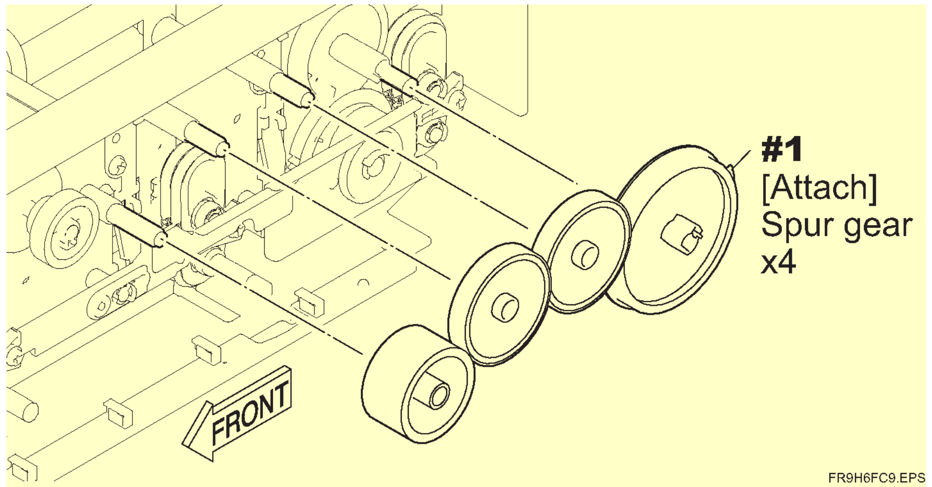
29. **Verify the attachment locations of the cam and the spur gear.**


Spur gear
Timing mark
Cam
Spur gear
FRONT
FR9H6F54.EPS

30. **Reinstall the grip arm (reference side).**


#1
[Reinstall]
Grip arm
Spacer
#2
[Secure]
KL6 (x1)
#3
[Secure]
E4 (x1)
FRONT
FR9H6F71.EPS

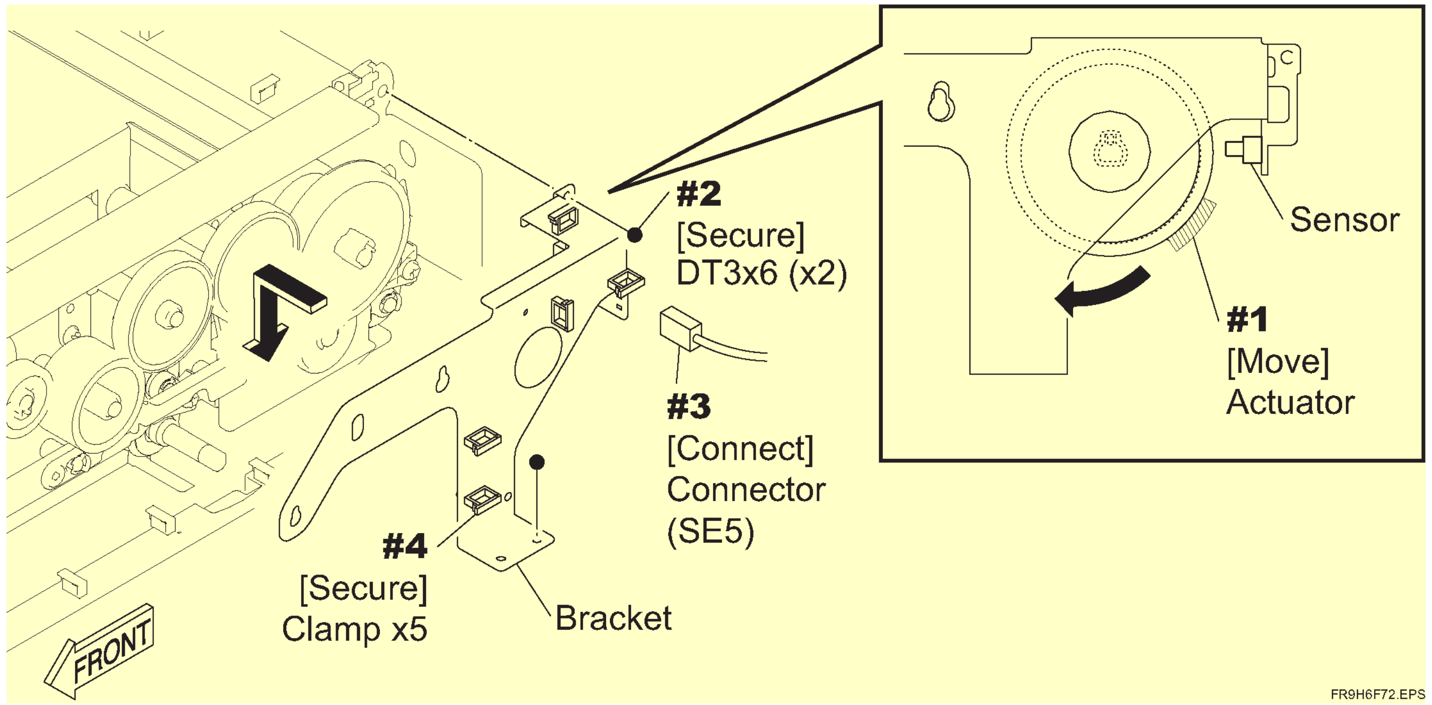
31. **Attach the spur gear.**


#1
[Attach]
Spur gear
x4
FRONT
FR9H6FC9.EPS

32. **Reinstall the bracket.**

◆ ***NOTE*** ◆

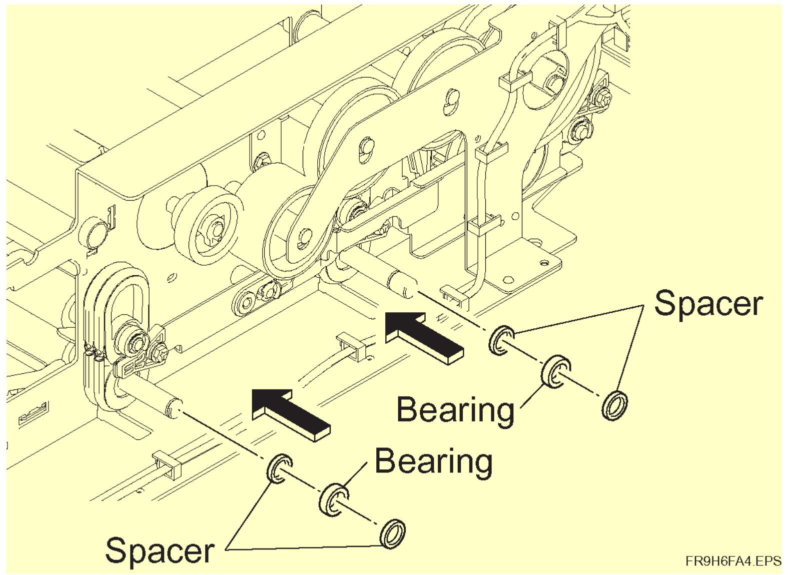
Before attaching the brackets, make sure that the actuator and sensor are in such a position that they do not interfere with each other


#2
[Secure]
DT3x6 (x2)
#3
[Connect]
Connector
(SE5)
#4
[Secure]
Clamp x5
Bracket
Sensor
#1
[Move]
Actuator
FRONT
FR9H6F72.EPS

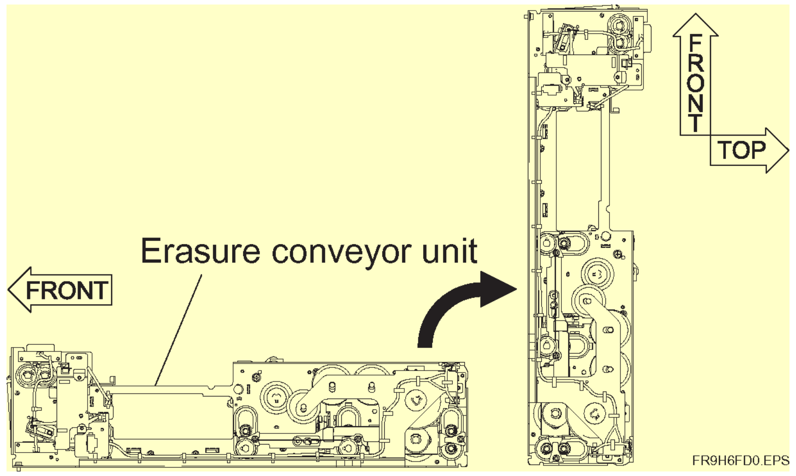
33. Attach the spacers and bearings.

◇ REFERENCE ◇

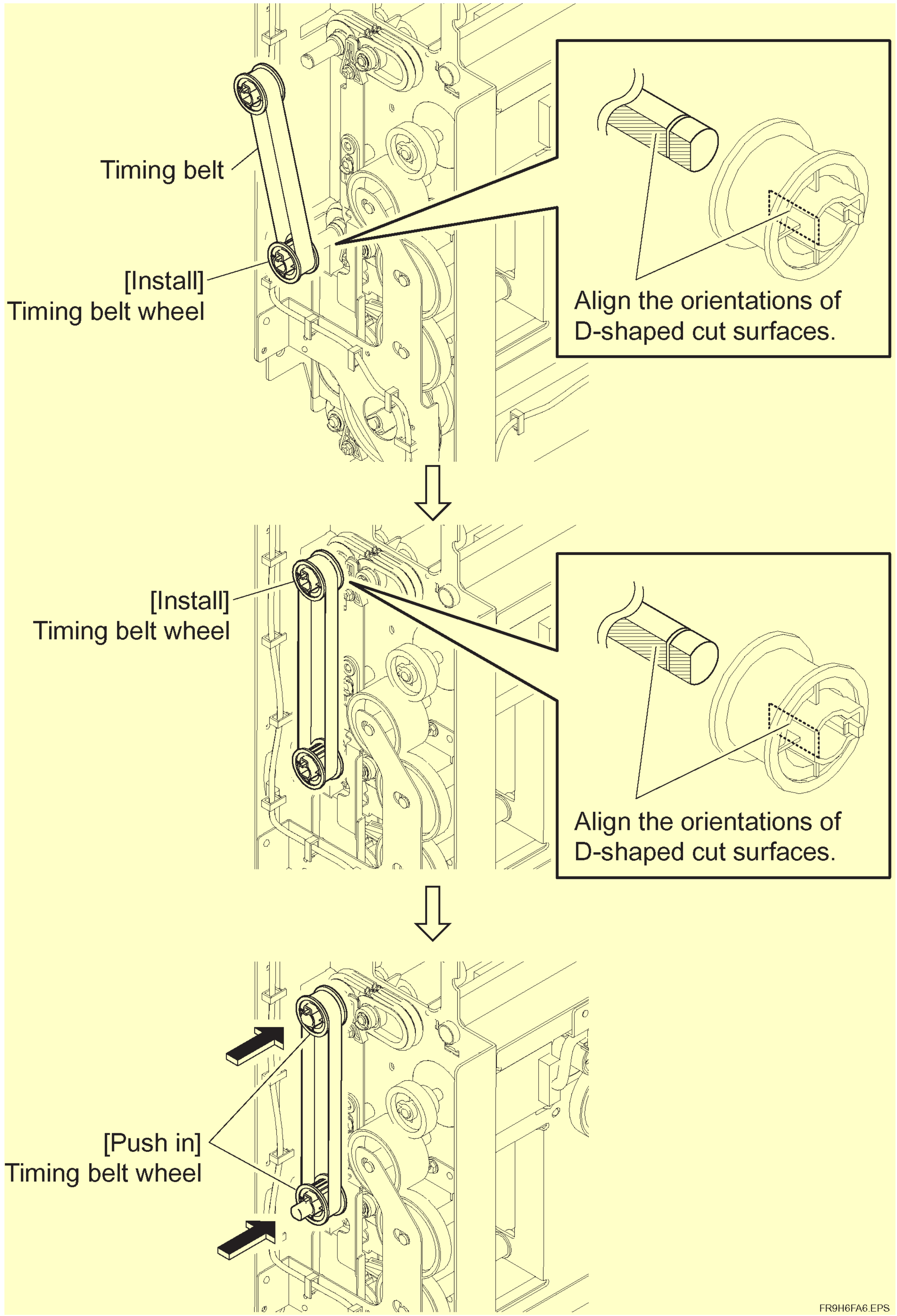
All of four spacers to be installed are of the same size.


Spacer
Bearing
Bearing
Spacer
FR9H6FA4.EPS

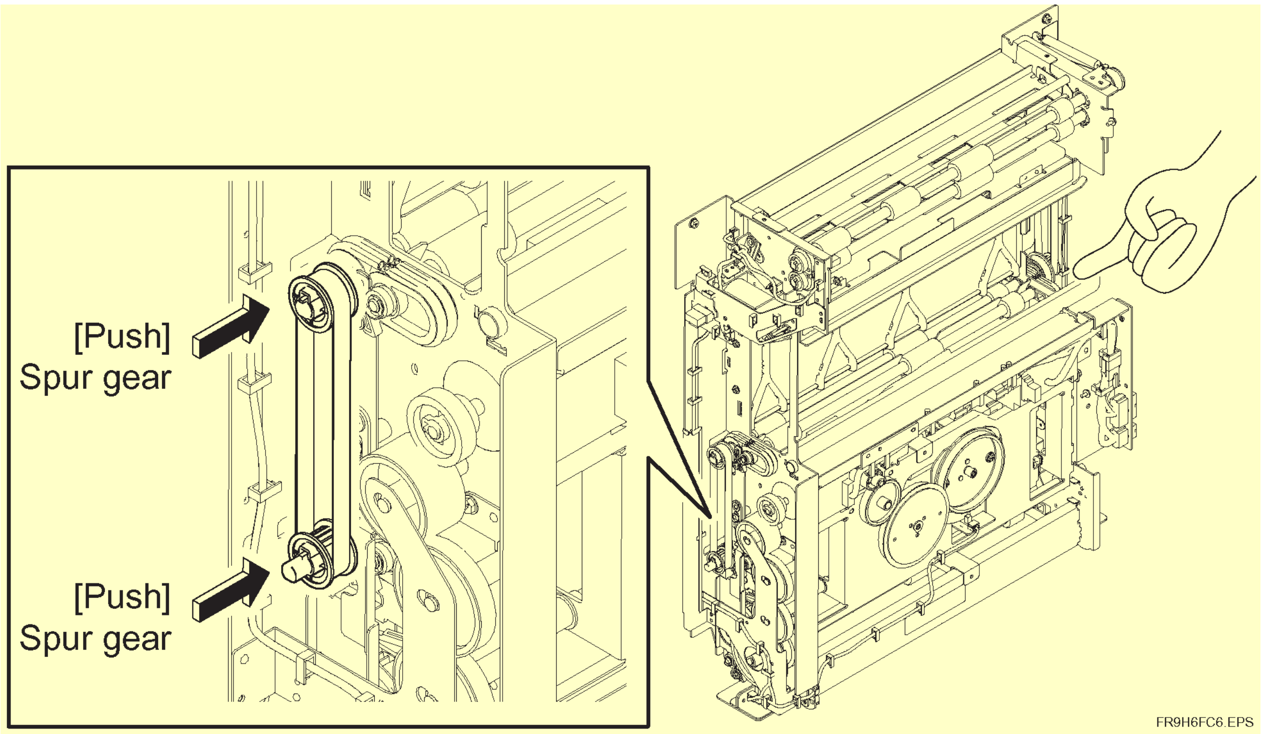
34. Put the erasure conveyor unit in such an orientation as illustrated below.


FRONT
TOP
Erasure conveyor unit
FRONT
FR9H6FD0.EPS

35. Reinstall the timing belt and the timing belt wheels.


Timing belt
[Install]
Timing belt wheel
Align the orientations of D-shaped cut surfaces.
[Install]
Timing belt wheel
Align the orientations of D-shaped cut surfaces.
[Push in]
Timing belt wheel
FR9H6FA6.EPS

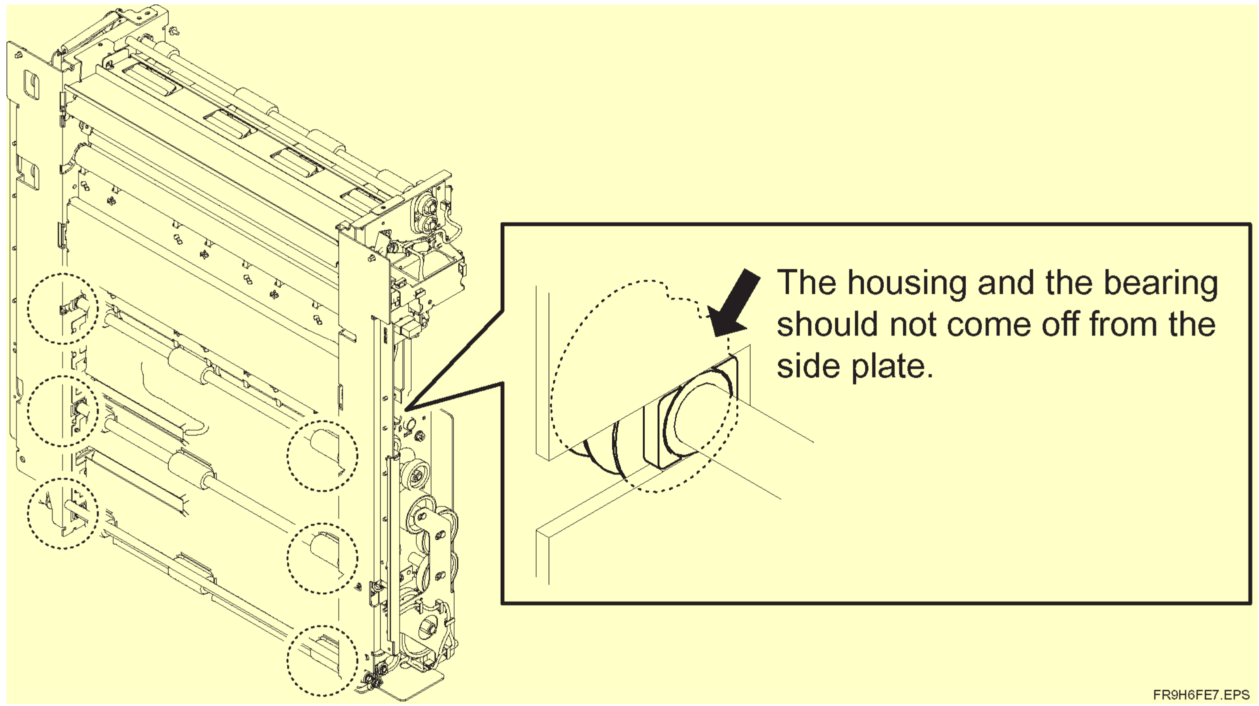
36. **After the spur gear is pushed in with the rod end held, check to ensure that the latch of the spur gear gets caught in the groove of the rod and does not come off.**


[Push]
Spur gear
[Push]
Spur gear
FR9H6FC6.EPS

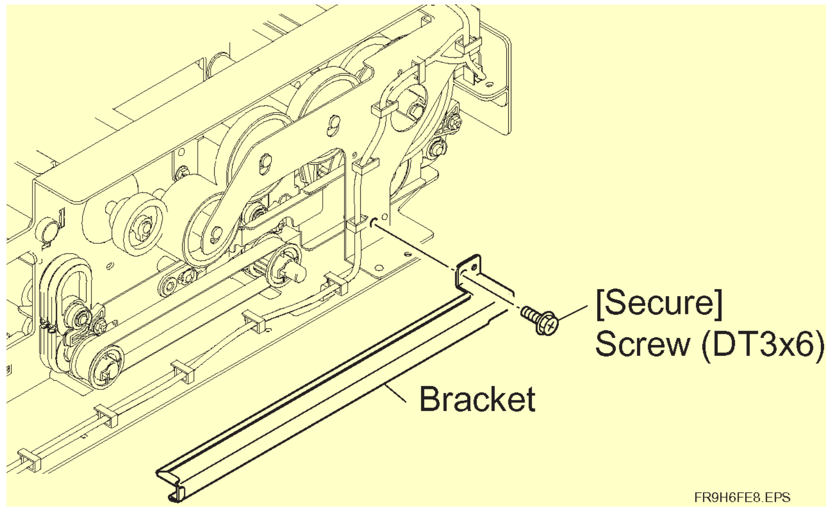
37. **Verify the attachment of the housing and the bearing from the bottom of the erasure conveyor unit.**

◆ **NOTE** ◆

Check to ensure that the portions indicated by the dotted lines in the figure below have not come off from the side plate of the erasure conveyor unit.


The housing and the bearing should not come off from the side plate.
FR9H6FE7.EPS

38. **Reinstall the bracket.**

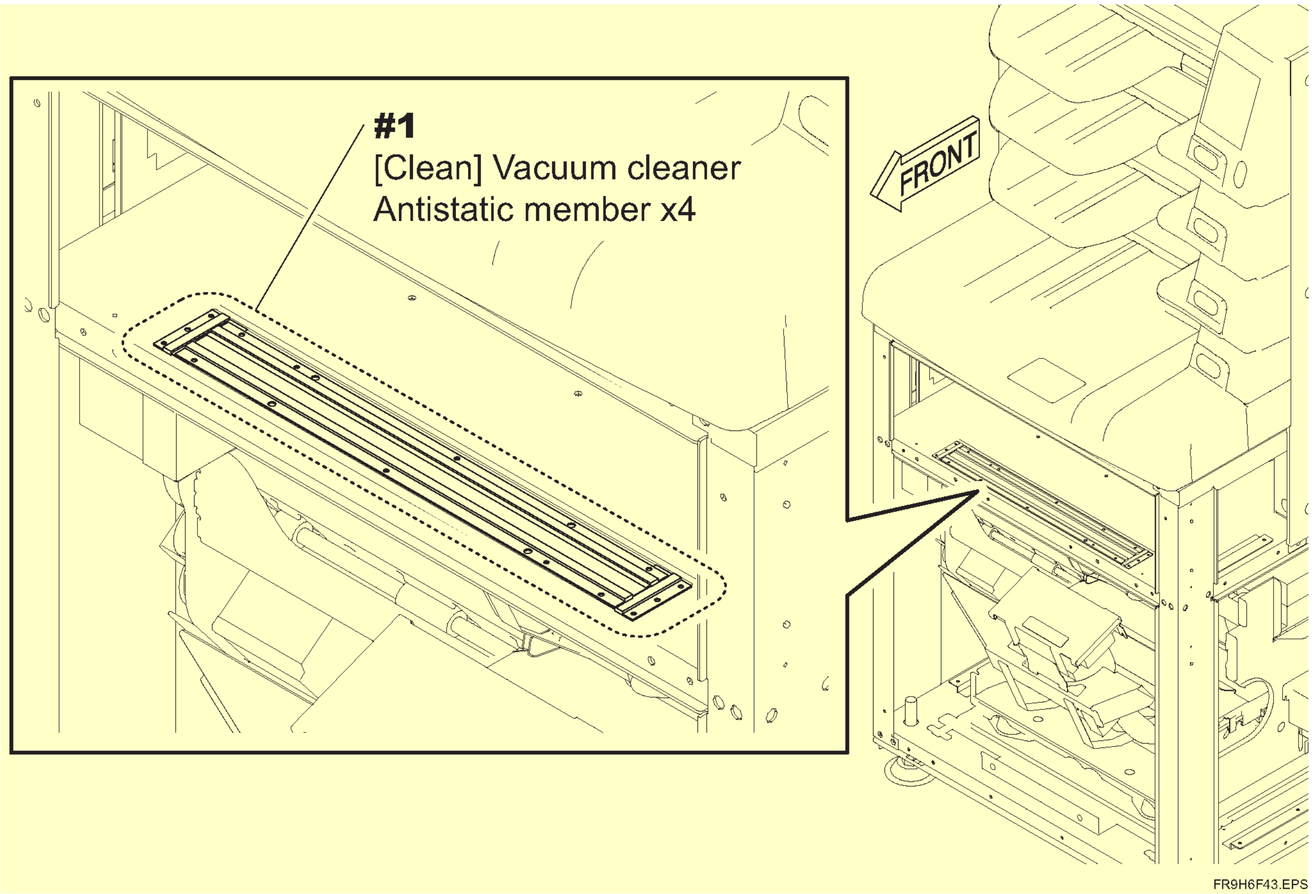

[Secure]
Screw (DT3x6)
Bracket
FR9H6FE8.EPS

2Y ☞ {PM:13.10}

13.10 Cleaning the Antistatic Members

2Y ☞ {PM:13.11}

1. **Clean the antistatic members by use of a vacuum cleaner.**



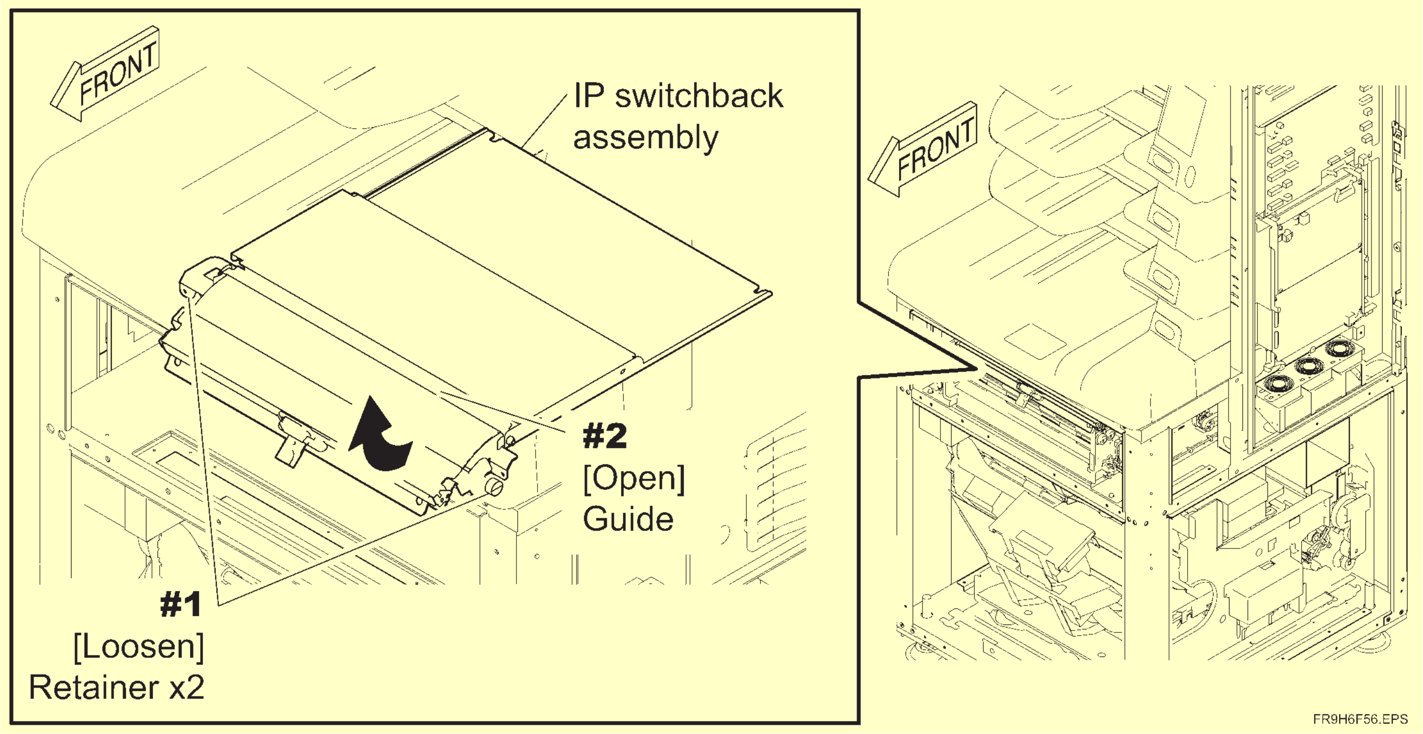
#1
[Clean] Vacuum cleaner
Antistatic member x4

FRONT
FR9H6F43.EPS

13.11 Reinstalling the Erasure Conveyor Unit

2Y

1. **Open the guide.**



FRONT
IP switchback assembly
FRONT
FR9H6F56.EPS

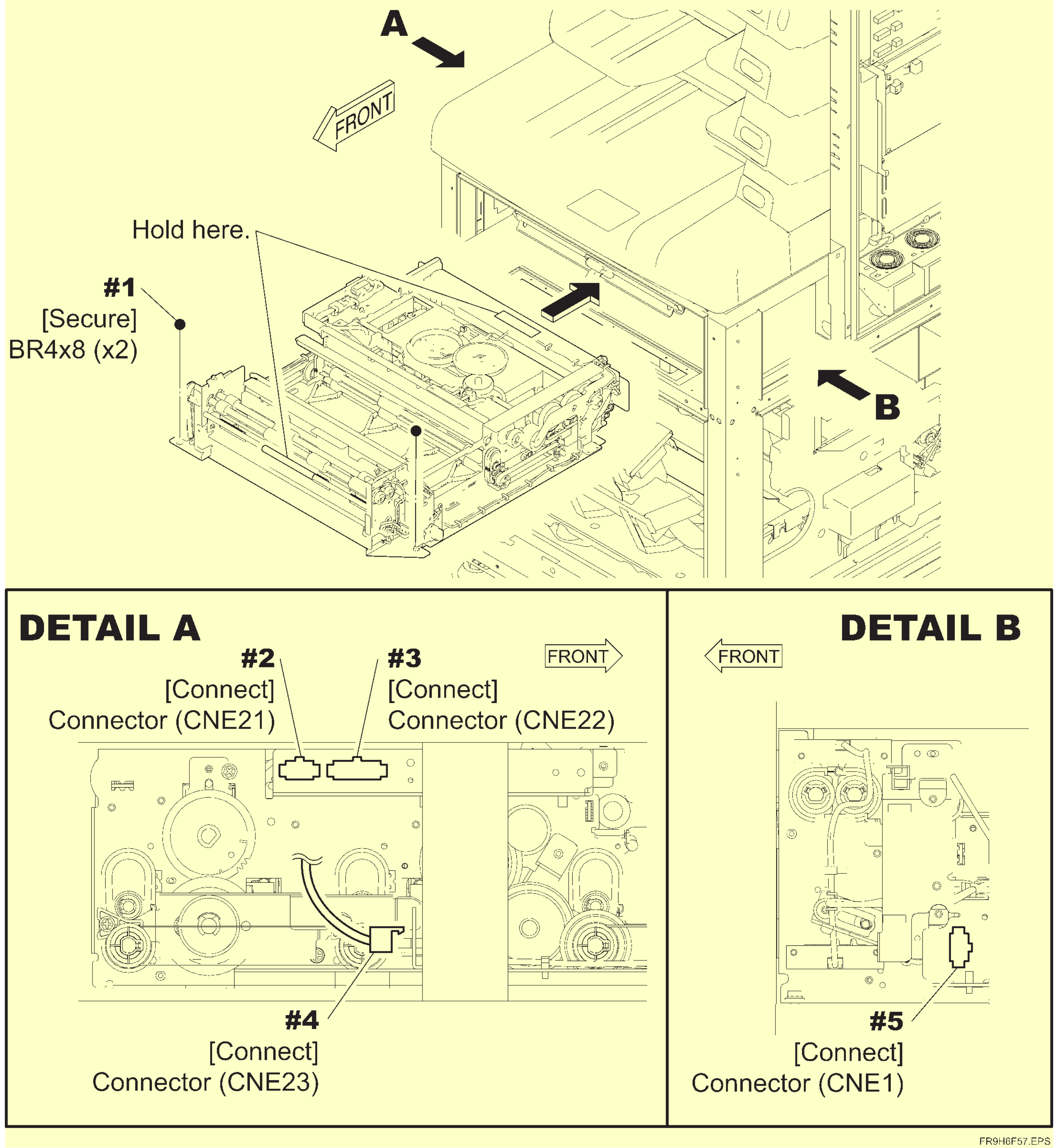
#1
[Loosen]
Retainer x2

#2
[Open]
Guide

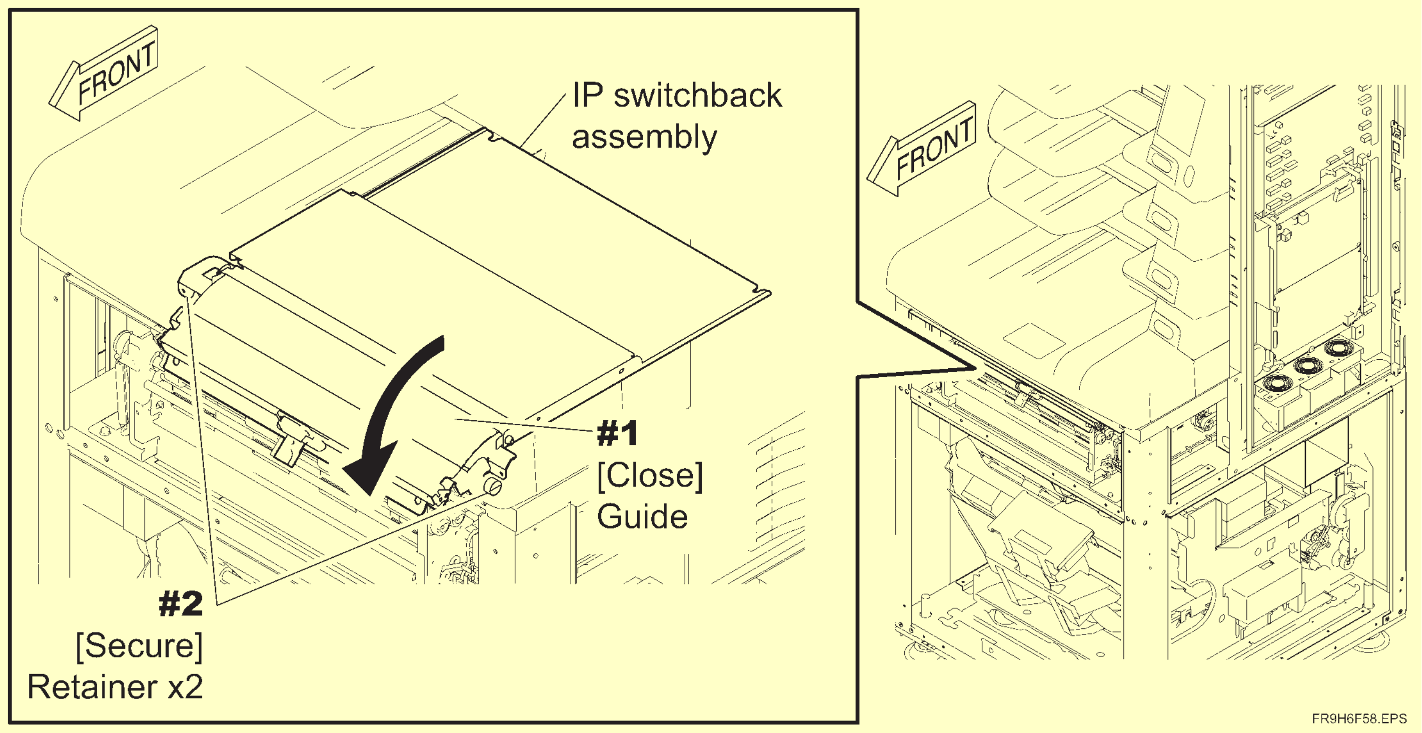
2. **Reinstall the erasure conveyor unit.**

◆ *NOTE* ◆

When installing the erasure conveyor unit, take hold of the designated portions to perform the procedures. If you grasp the rollers, guides, or other portions, they may be deformed.


A
FRONT
Hold here.
#1
[Secure]
BR4x8 (x2)
B
DETAIL A
#2
[Connect]
Connector (CNE21)
#3
[Connect]
Connector (CNE22)
FRONT
#4
[Connect]
Connector (CNE23)
DETAIL B
FRONT
#5
[Connect]
Connector (CNE1)
FR9H6F57.EPS

3. **Close the guide.**


FRONT
IP switchback
assembly
#1
[Close]
Guide
#2
[Secure]
Retainer x2
FRONT
FR9H6F58.EPS

4. **Check to ensure that the screws once removed are snugly retained.**

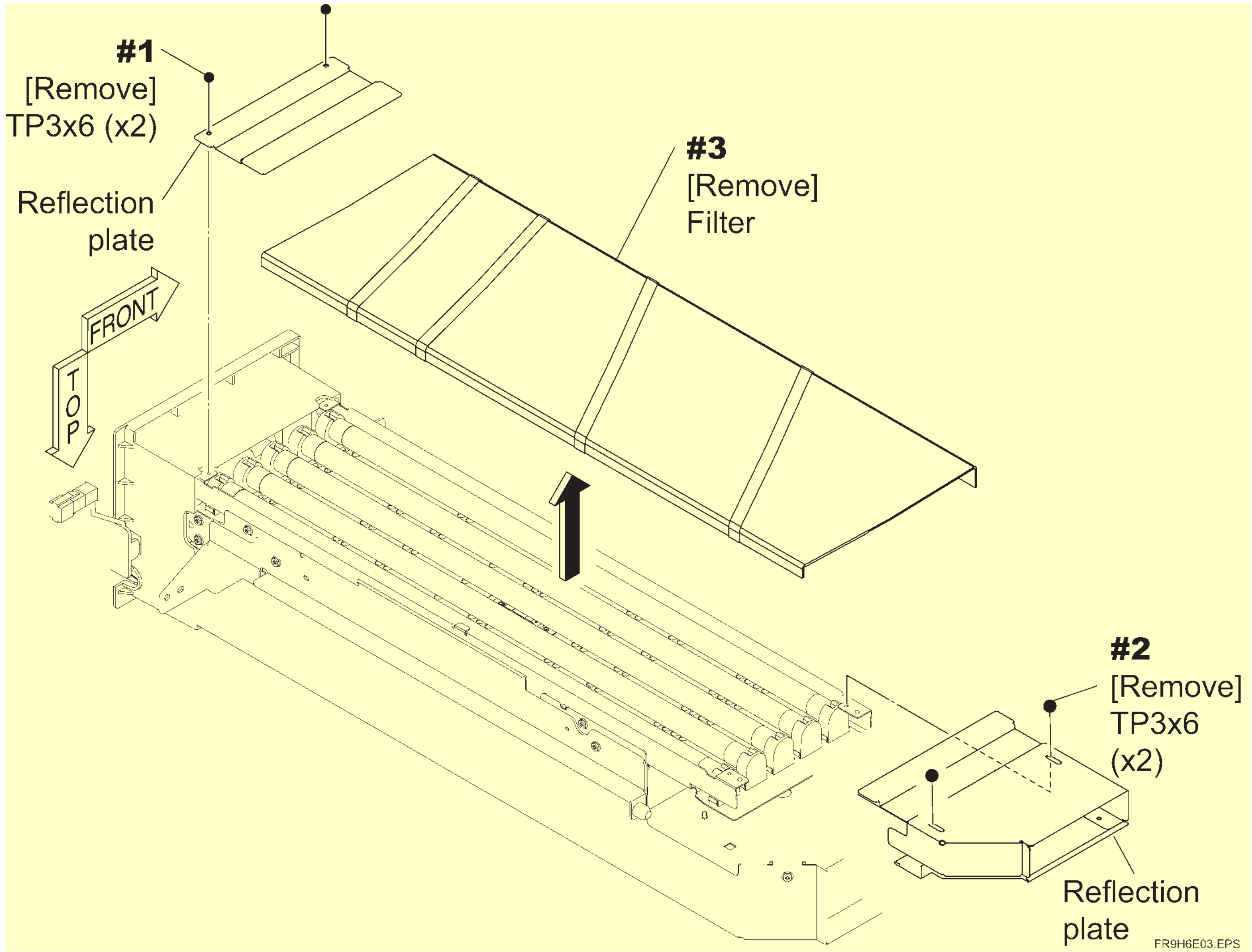
#20001 or later : 2Y ☞ {PM:14.1}
#50001 or later : 2Y ☞ {PM:14.4}

14. Lamp Assembly

14.1 Cleaning/Replacing the Lamps (#20001 or later)

1Y 2Y 3Y

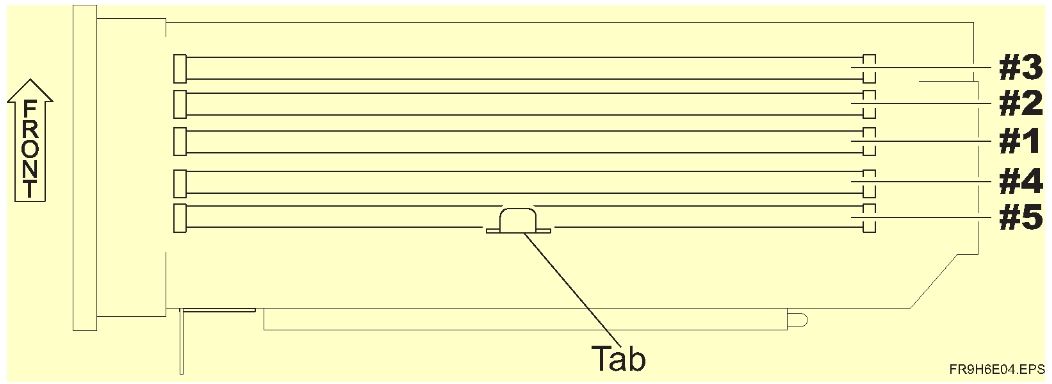
1. **Remove the filter.**


#1
[Remove]
TP3x6 (x2)
Reflection plate
#3
[Remove]
Filter
FRONT
TOP
#2
[Remove]
TP3x6
(x2)
Reflection plate
FR9H6E03.EPS

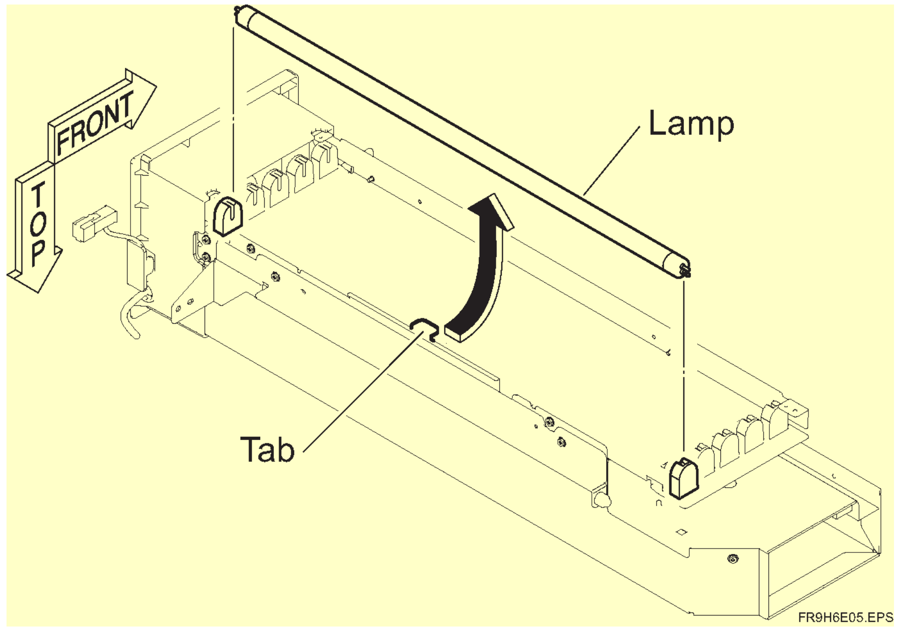
2. **Remove the lamps.**

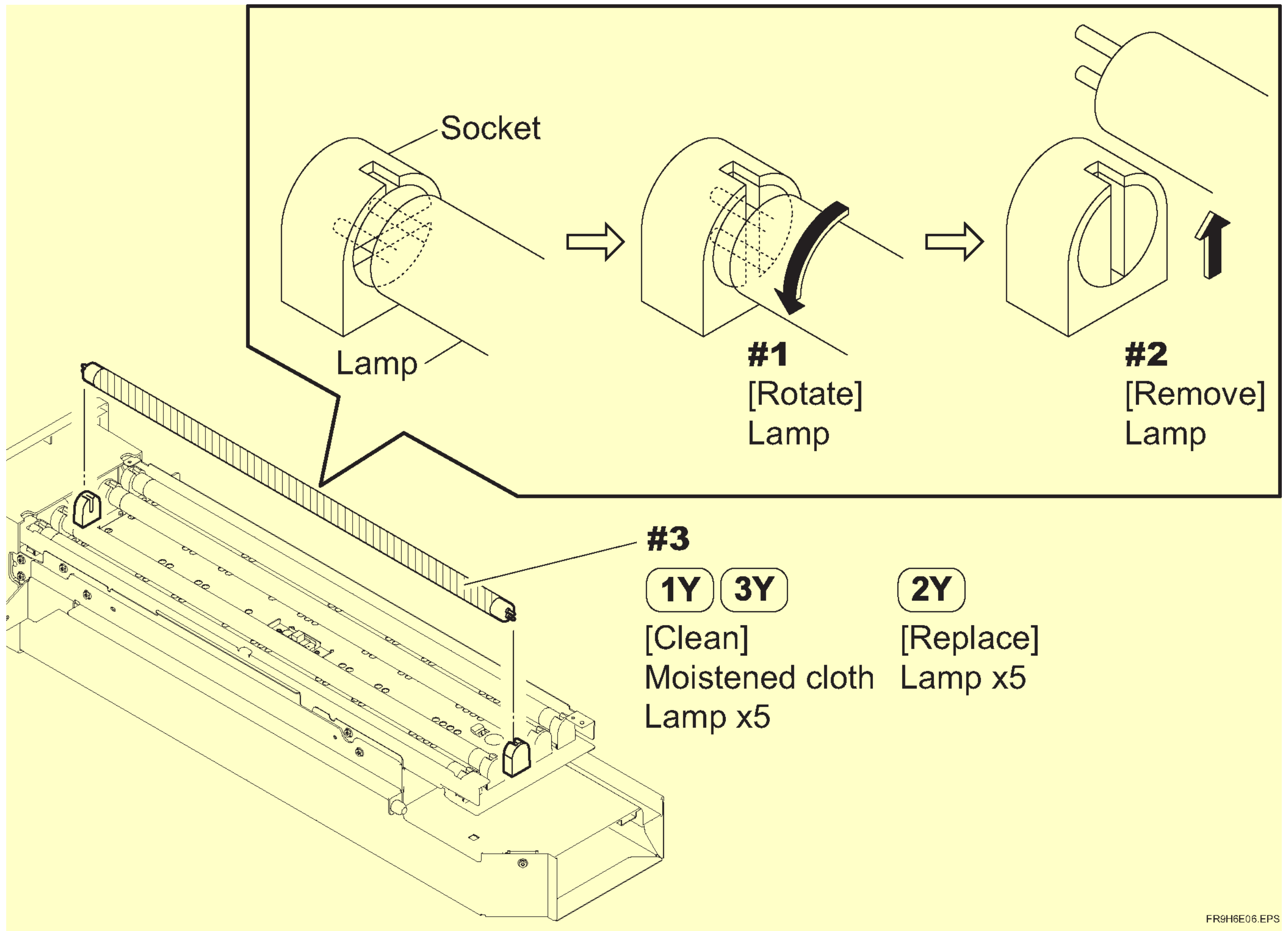
◆ ***NOTES*** ◆

- *Remove the lamps in such order as illustrated below.*

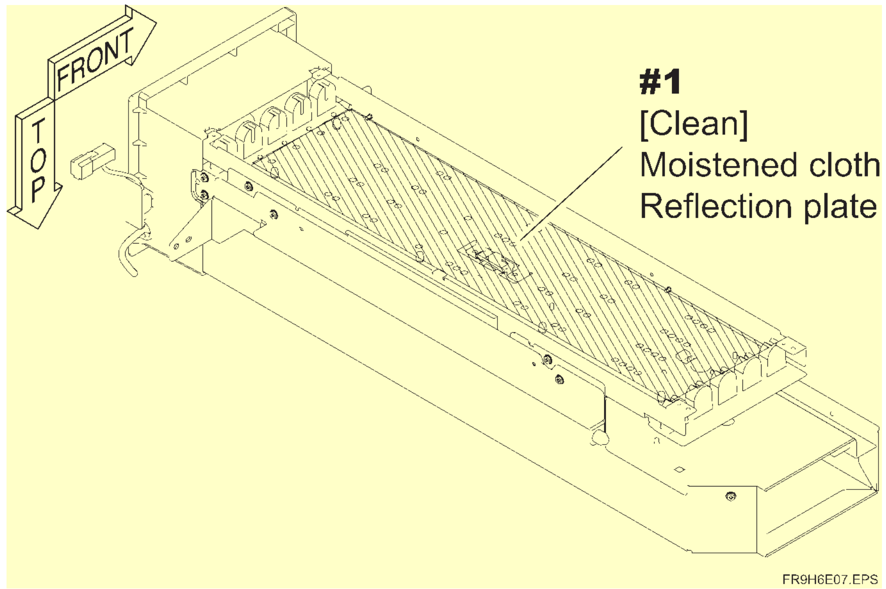

FRONT
#3
#2
#1
#4
#5
Tab
FR9H6E04.EPS

- *While avoiding the tab of the lamp assembly, detach the lamp aslant. Otherwise, the lamp may be scratched or damaged.*


FRONT
TOP
Lamp
Tab
FR9H6E05.EPS


Socket
Lamp
#1
[Rotate]
Lamp
#2
[Remove]
Lamp
#3
1Y 3Y
[Clean]
Moistened cloth
Lamp x5
2Y
[Replace]
Lamp x5
FR9H6E06.EPS

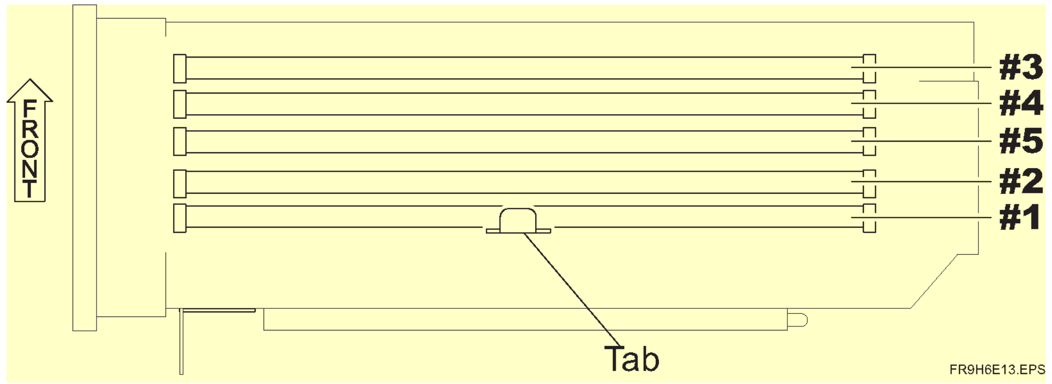
3. **Clean the reflection plate with a moistened cloth.**

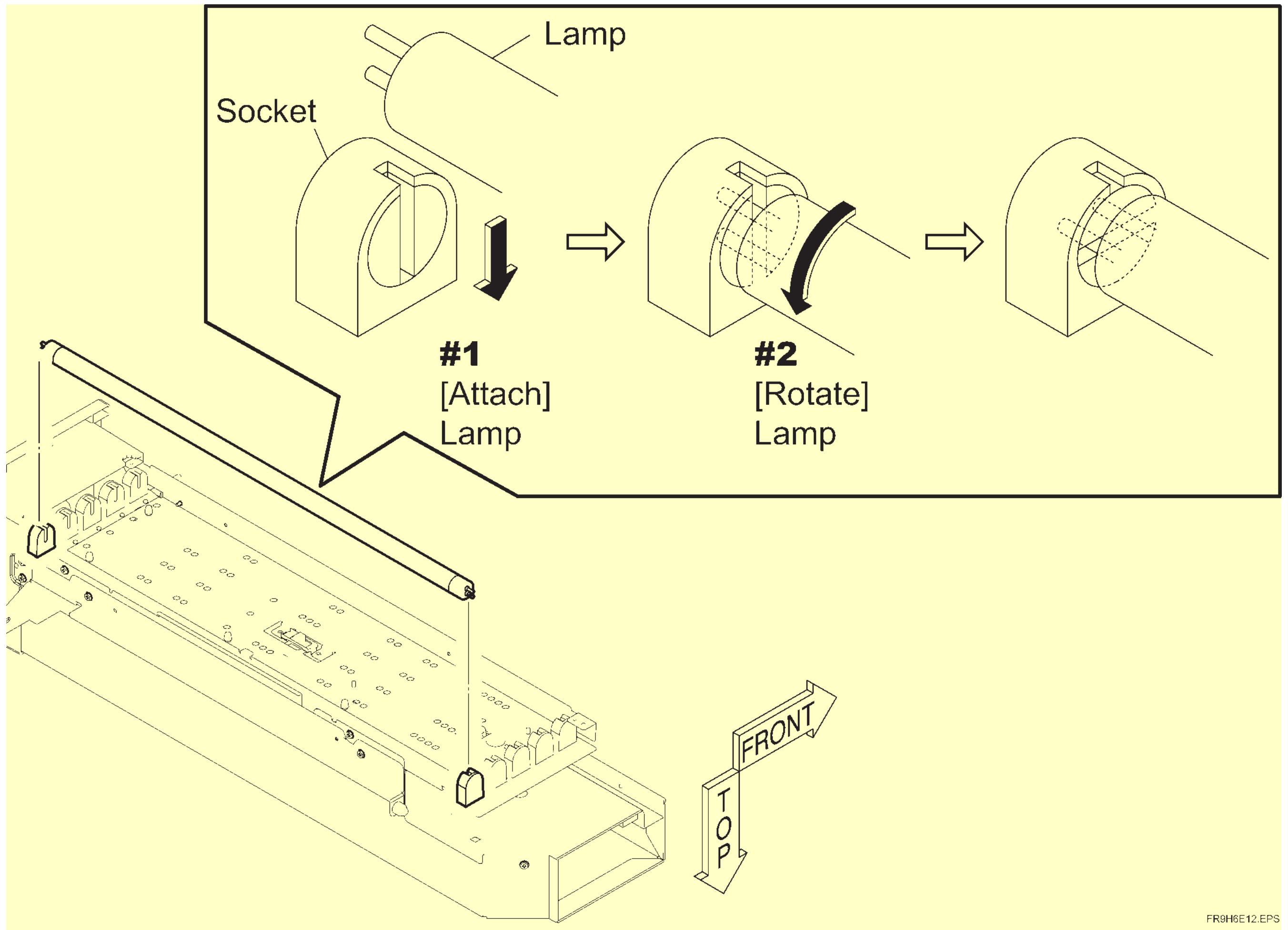

FRONT
TOP
#1
[Clean]
Moistened cloth
Reflection plate
FR9H6E07.EPS

4. **Reinstall the lamps.**

◆ NOTE ◆

- *Install the lamps in such order as illustrated below.*


FRONT
#3
#4
#5
#2
#1
Tab
FR9H6E13.EPS

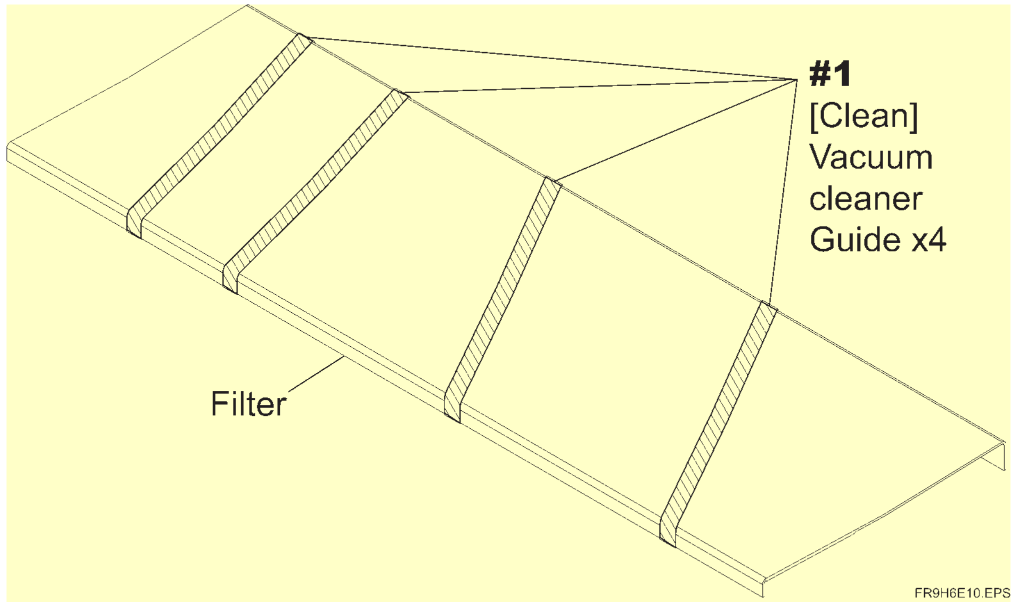

Lamp
Socket
#1
[Attach]
Lamp
#2
[Rotate]
Lamp
FRONT
TOP
FR9H6E12.EPS

1Y 2Y ☞ {PM:14.2}   3Y ☞ {PM:14.3}

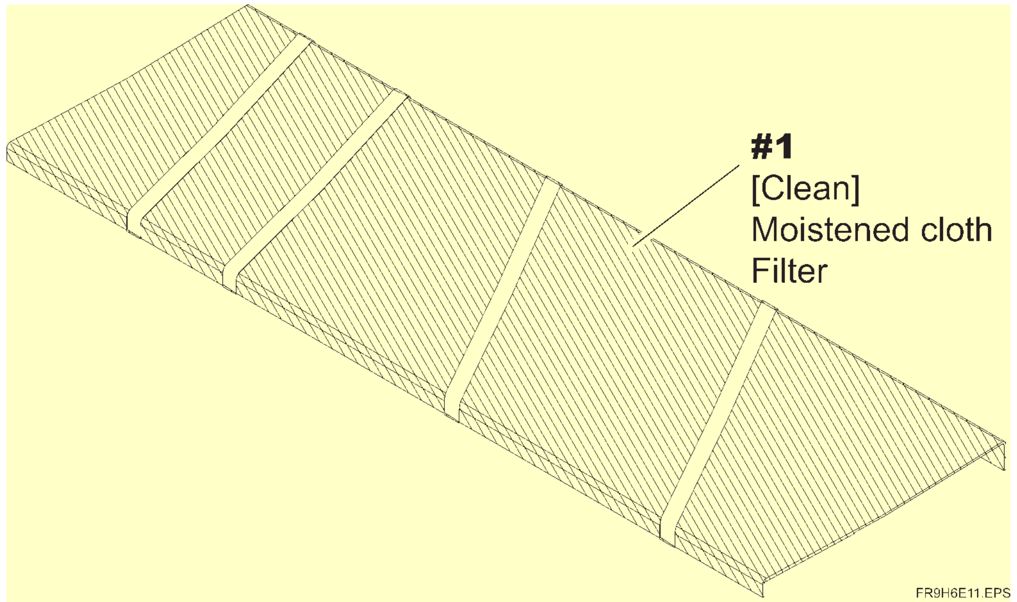
14.2 Cleaning the Filter (#20001 or later)

1Y **2Y** ☞ {PM:14.6}

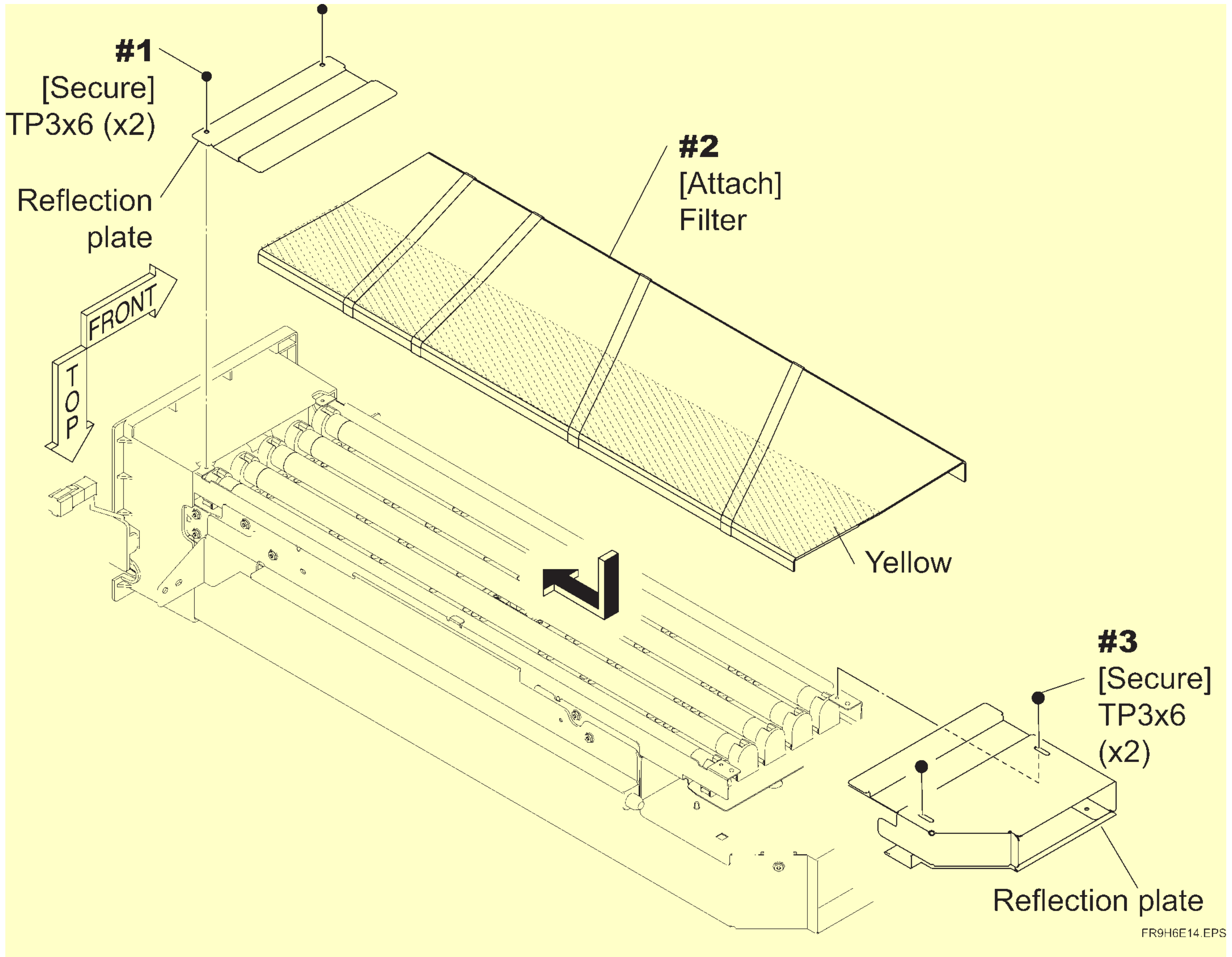
1. **Clean the guides by use of a vacuum cleaner.**


#1
[Clean]
Vacuum
cleaner
Guide x4
Filter
FR9H6E10.EPS

2. **Clean the filter with a moistened cloth.**


#1
[Clean]
Moistened cloth
Filter
FR9H6E11.EPS

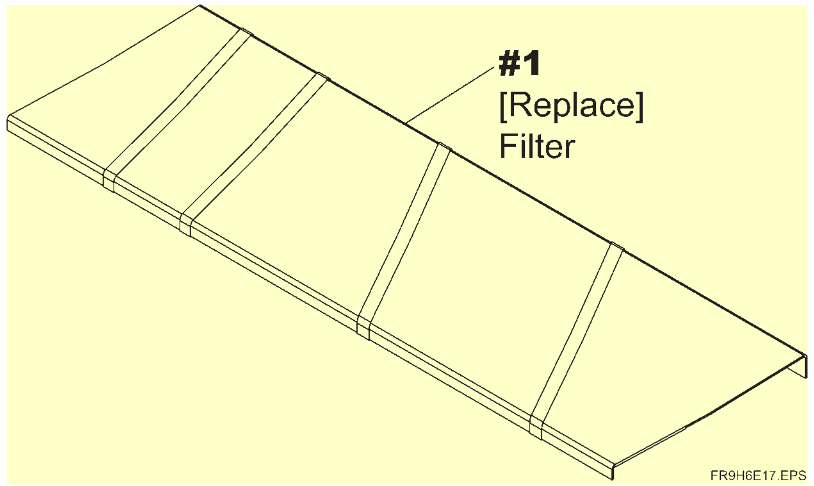
3. **Attach the filter and reflection plates.**


#1
[Secure]
TP3x6 (x2)
Reflection
plate
FRONT
TOP
#2
[Attach]
Filter
Yellow
#3
[Secure]
TP3x6
(x2)
Reflection plate
FR9H6E14.EPS

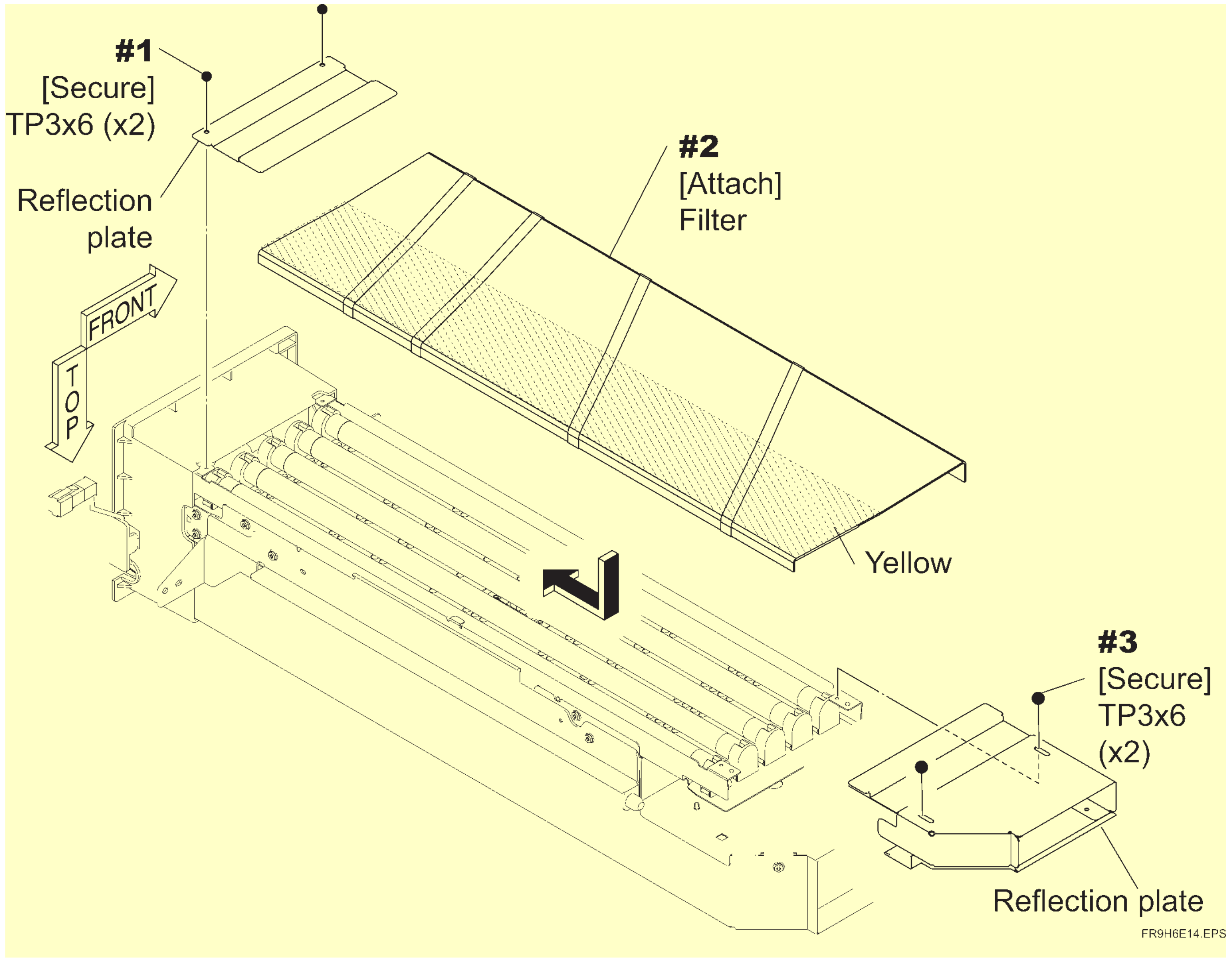
14.3 Replacing the Filter (#20001 or later)

3Y ☞ {PM:14.6}

1. **Replace the filter.**


#1
[Replace]
Filter
FR9H6E17.EPS

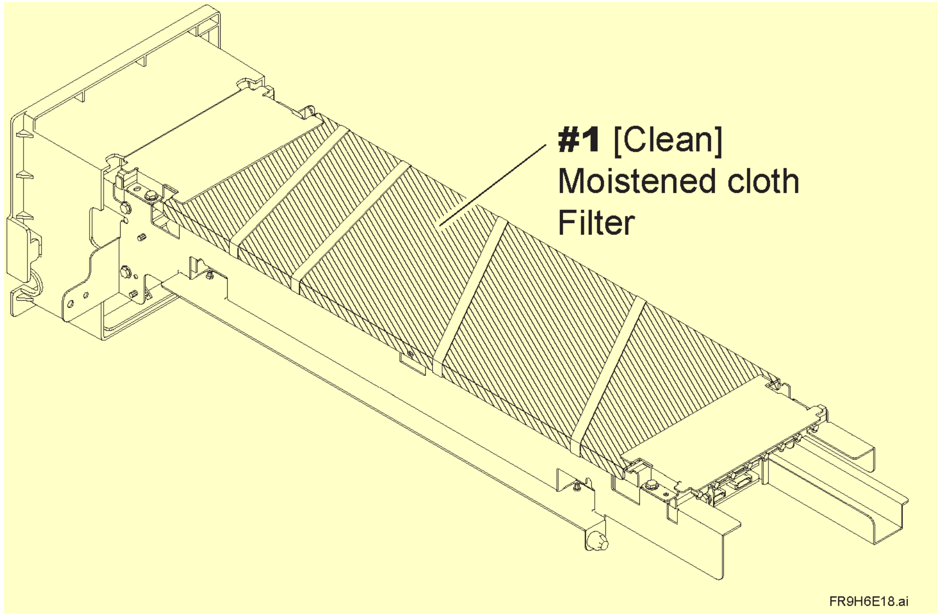
2. **Attach the filter and reflection plates.**


#1
[Secure]
TP3x6 (x2)
Reflection plate
FRONT
TOP
#2
[Attach]
Filter
Yellow
#3
[Secure]
TP3x6
(x2)
Reflection plate
FR9H6E14.EPS

14.4 Cleaning the Filter (#50001 or later)

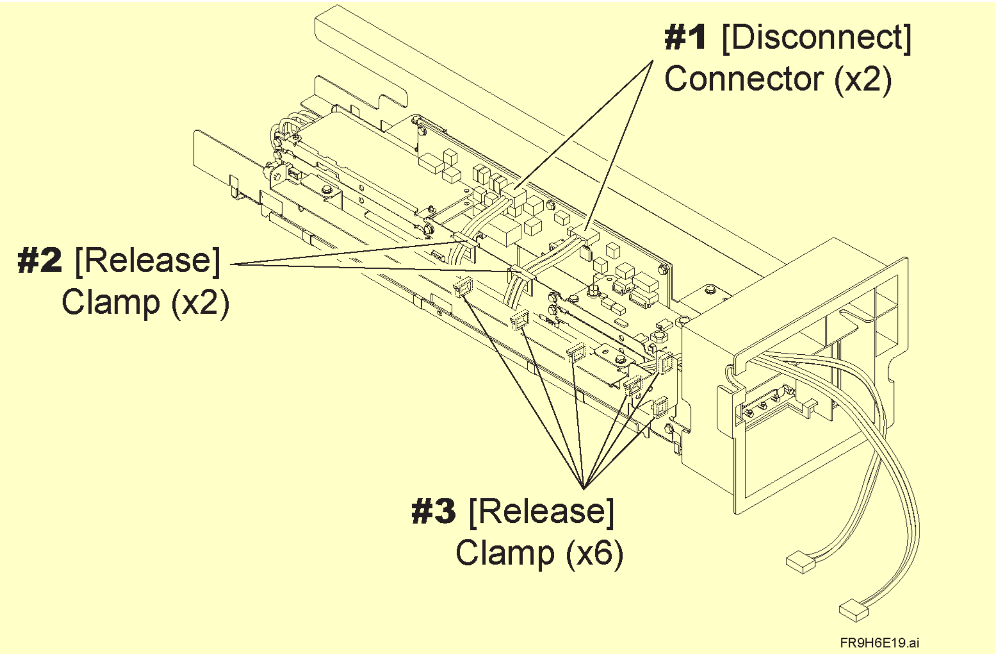
1Y 2Y ☞ {PM:14.6}

1. **Clean the filter with a moistened cloth.**

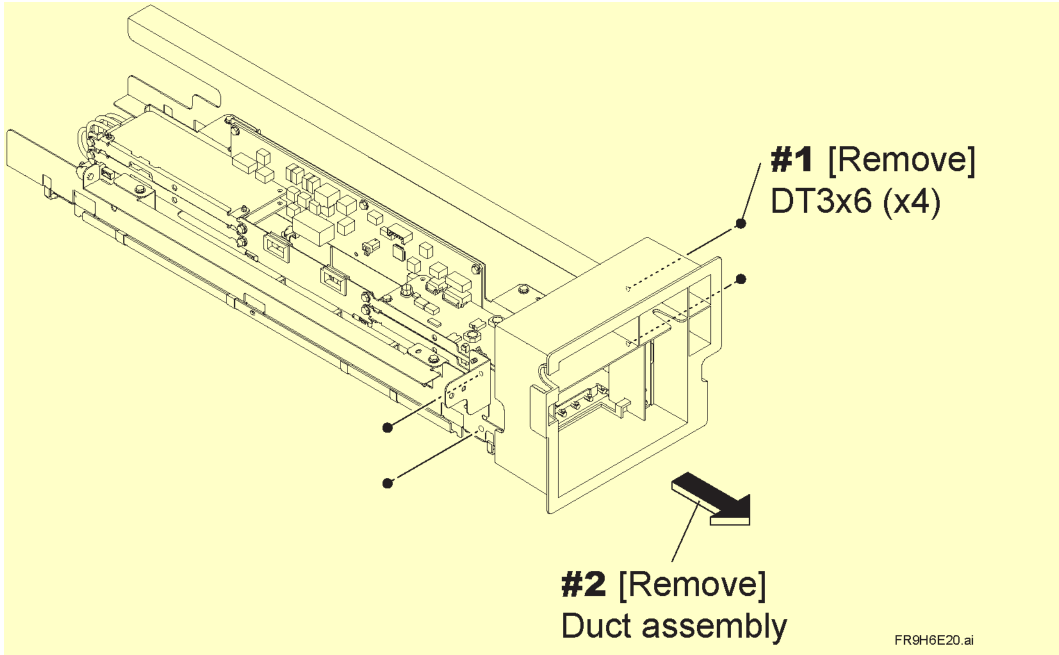

#1 [Clean]
Moistened cloth
Filter
FR9H6E18.ai

14.5 Replacing the Lamp Assembly (#50001 or later)

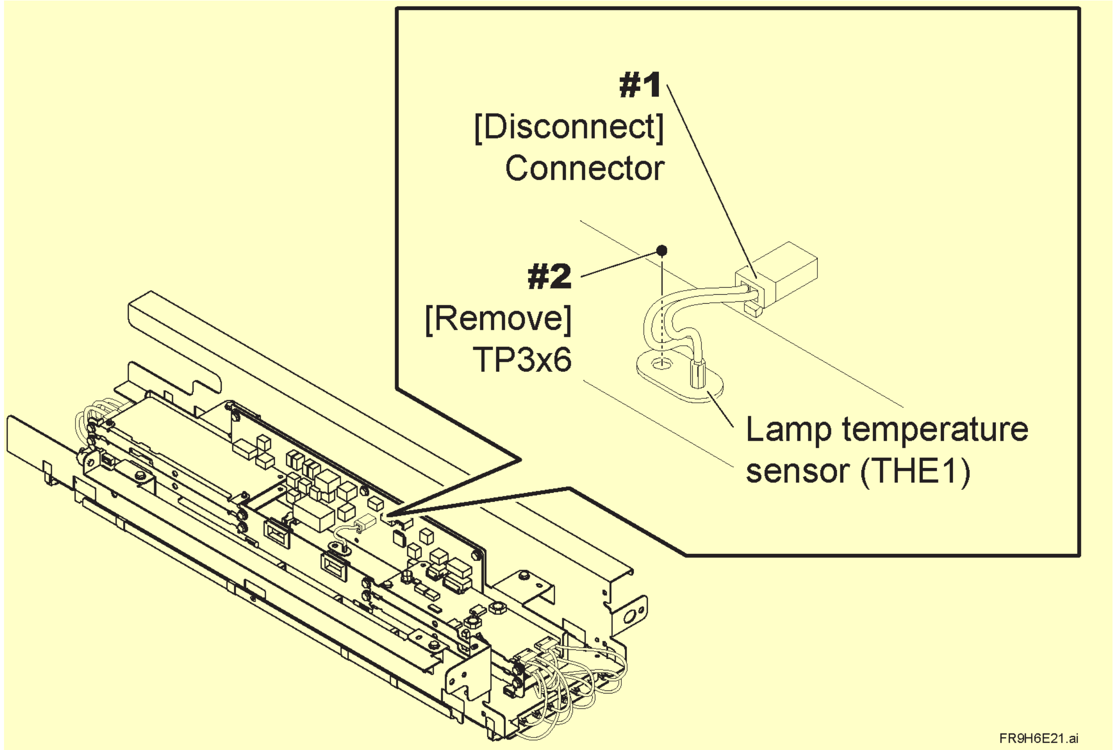
1. **Disconnect the connectors and release the clamps.**


#1 [Disconnect]
Connector (x2)
#2 [Release]
Clamp (x2)
#3 [Release]
Clamp (x6)
FR9H6E19.ai

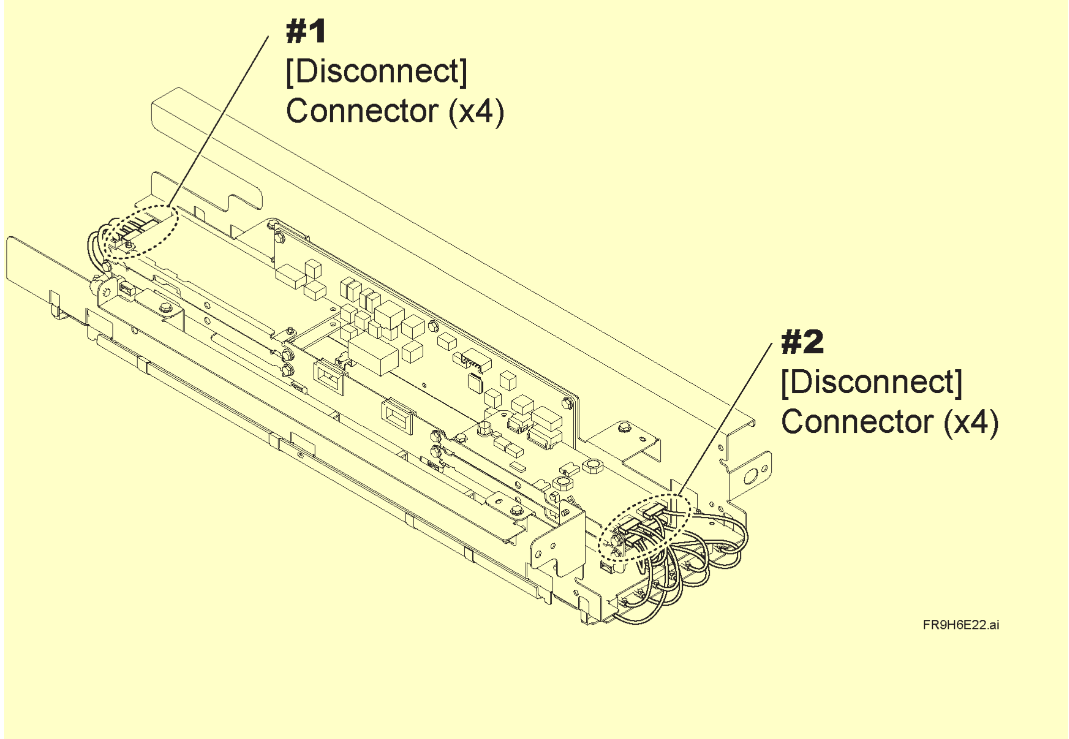
2. **Remove the duct.**


#1 [Remove]
DT3x6 (x4)
#2 [Remove]
Duct assembly
FR9H6E20.ai

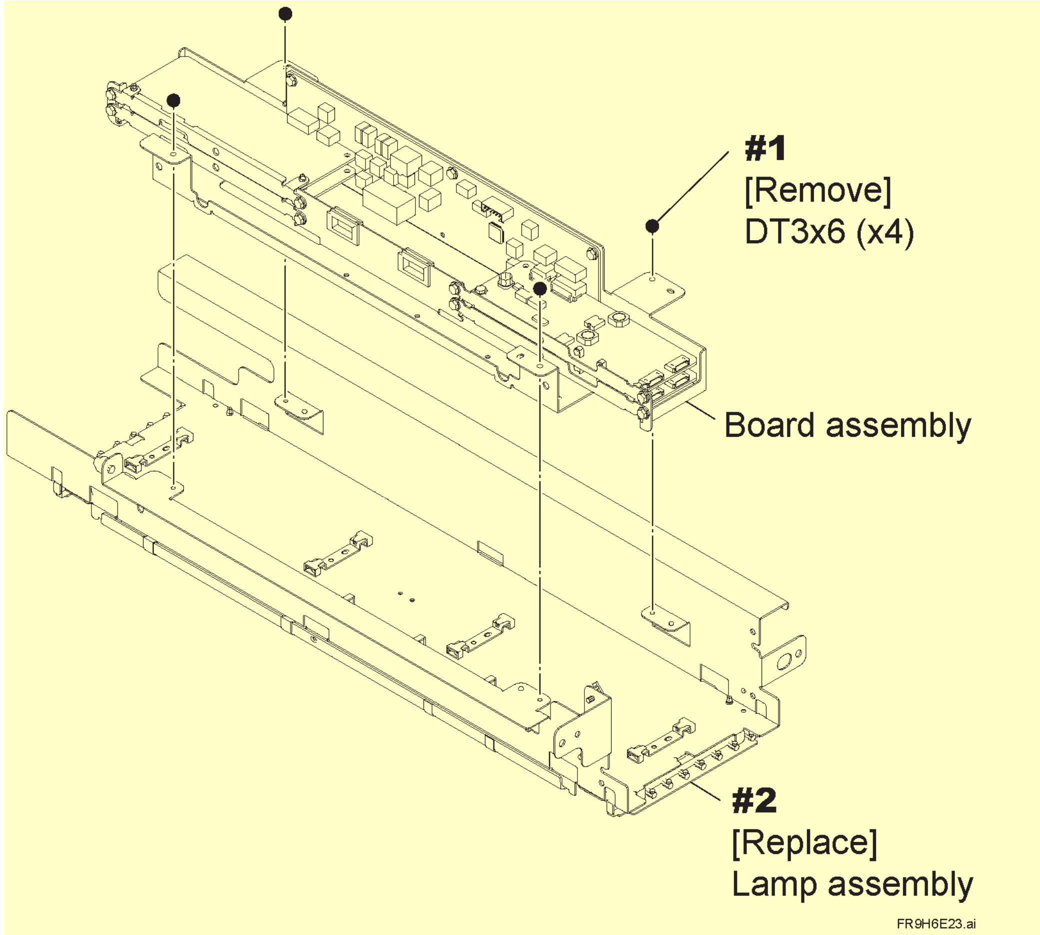
3. **Remove the lamp temperature sensor (THE1).**


#1
[Disconnect]
Connector
#2
[Remove]
TP3x6
Lamp temperature
sensor (THE1)
FR9H6E21.ai

4. **Disconnect the connectors.**


#1
[Disconnect]
Connector (x4)
#2
[Disconnect]
Connector (x4)
FR9H6E22.ai

5. **Remove the board assembly and replace the lamp assembly.**


#1
[Remove]
DT3x6 (x4)
Board assembly
#2
[Replace]
Lamp assembly
FR9H6E23.ai

6. **Assemble the lamp assembly by reversing the step1-5.**

3Y ☞ {PM:14.6}

14.6 Reinstalling the Lamp Assembly

1Y ☞ {PM:17.}   2Y ☞ {PM:15.}   3Y ☞ {PM:16.}

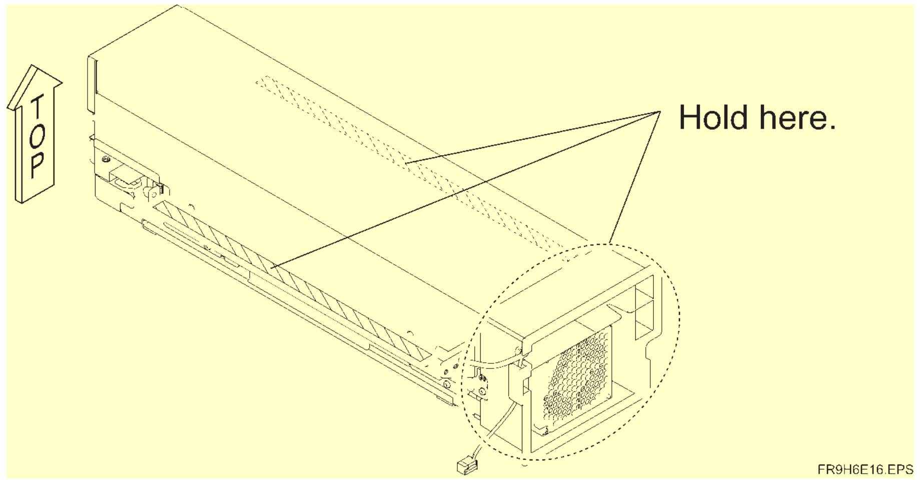
◆ **NOTE** ◆

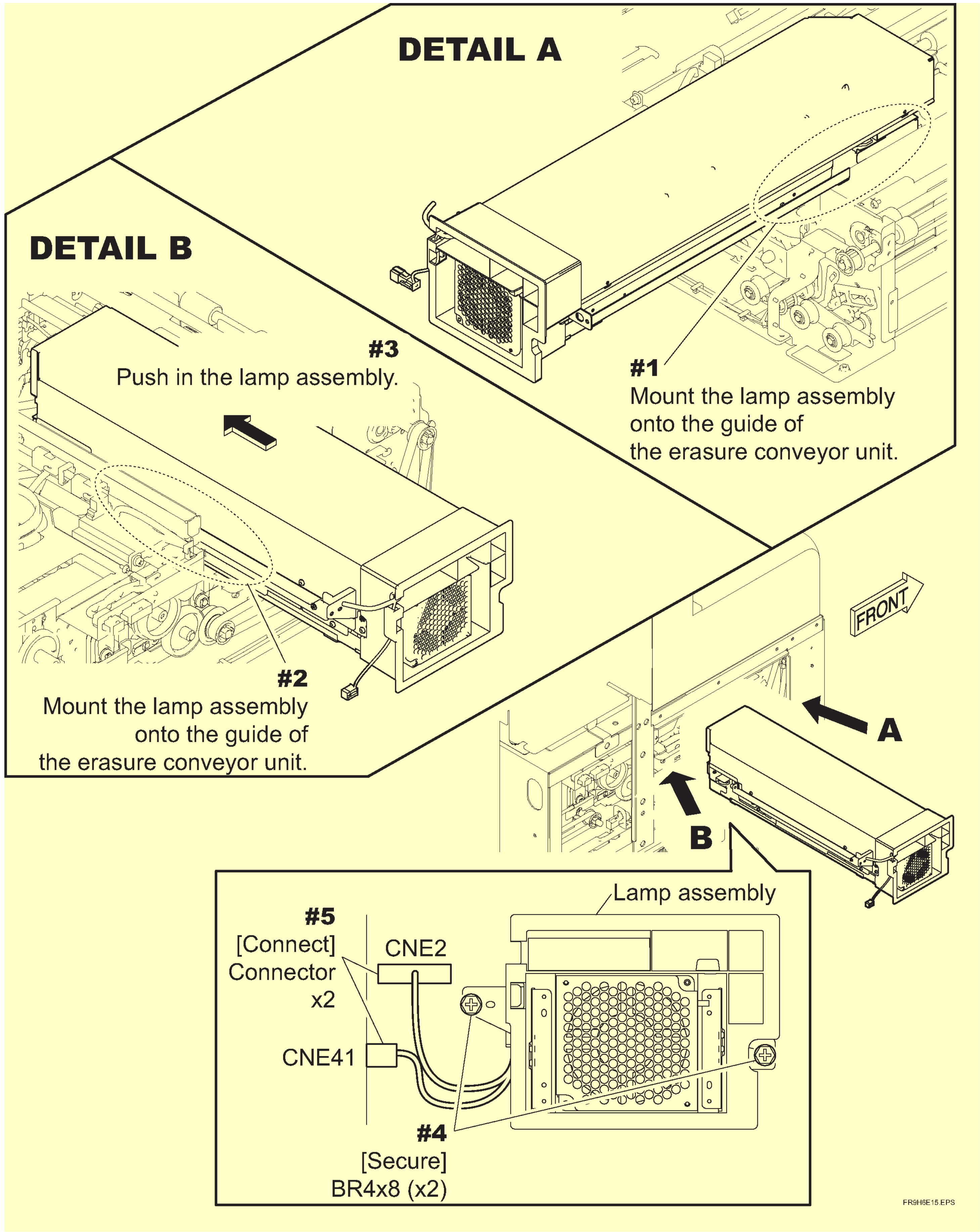
The shapes of lamp assembly differ between #20001 or later and #50001 or later; however, reinstallation procedures are same.

1. **Reinstall the lamp assembly.**

◆ ***INSTRUCTION*** ◆

When handling the lamp assembly, take hold of the portions illustrated below to perform the procedures.


TOP
Hold here.
FR9H6E16.EPS


DETAIL A
DETAIL B
#3
Push in the lamp assembly.
#1
Mount the lamp assembly onto the guide of the erasure conveyor unit.
#2
Mount the lamp assembly onto the guide of the erasure conveyor unit.
FRONT
A
B
Lamp assembly
#5
[Connect]
Connector
x2
CNE2
CNE41
#4
[Secure]
BR4x8 (x2)
FR9H6E15.EPS

2. **Check to ensure that the screws once removed are snugly retained.**

15. Cleaning Inside the Machine

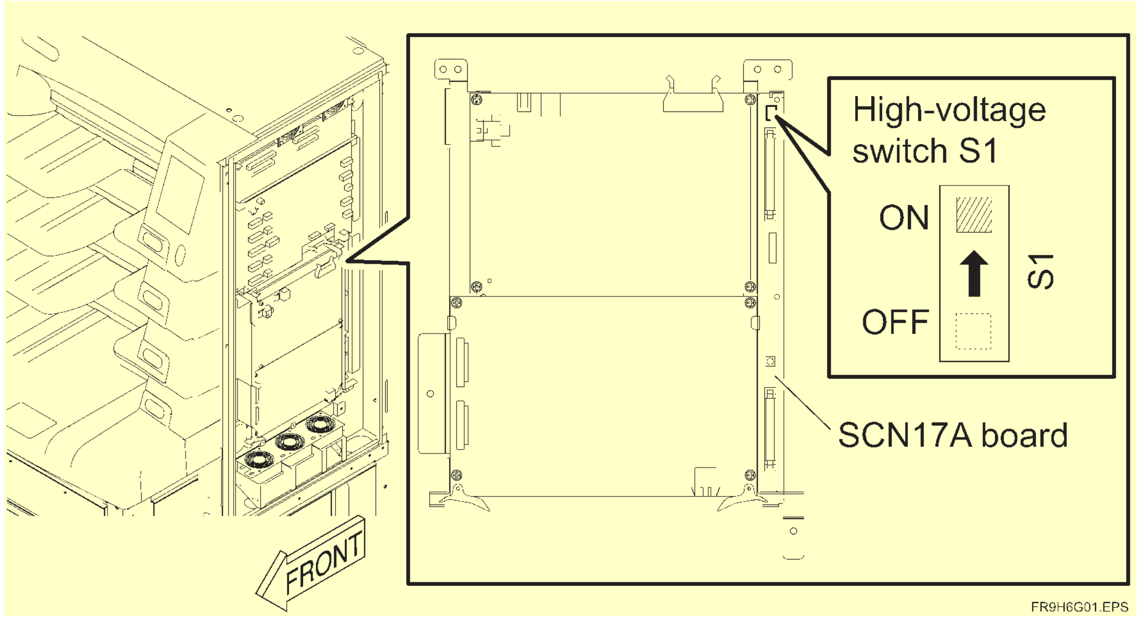
2Y ☞ {PM:16.}

1. **Using a vacuum cleaner, remove dust deposited inside the machine.**

16. Turning ON the High-Voltage Switch

2Y **3Y** ☞ {PM:17.}

1. **Turn ON the high-voltage switch.**


High-voltage switch S1
ON
OFF
S1
SCN17A board
FRONT
FR9H6G01.EPS

17. Cleaning/Reinstalling the Covers and Louvers

1Y **2Y** **3Y** ☞ {PM:18.}

⚠ **CAUTION**

Before reinstalling the covers,make sure that the high-voltage switch is in the ON position.

1. **Clean the covers and louvers.**

◆ ***INSTRUCTIONS*** ◆

- *The louvers should be cleaned at intervals of one year.*
- *Clean all of the eight louvers attached on the machine.*

2. **Reinstall the covers by reversing their removal procedures.**

#20001 or later : **1Y** **3Y** ☞ {PM:5.1} **2Y** ☞ {PM:5.3}

#50001 or later : **1Y** ☞ {PM:5.1} **2Y** ☞ {PM:5.3} **3Y** ☞ {PM: 5.4}

18. Cleaning/Replacing the Air Filter (#20001 or later)

1Y **2Y** **3Y** ☞ {PM:19.1}

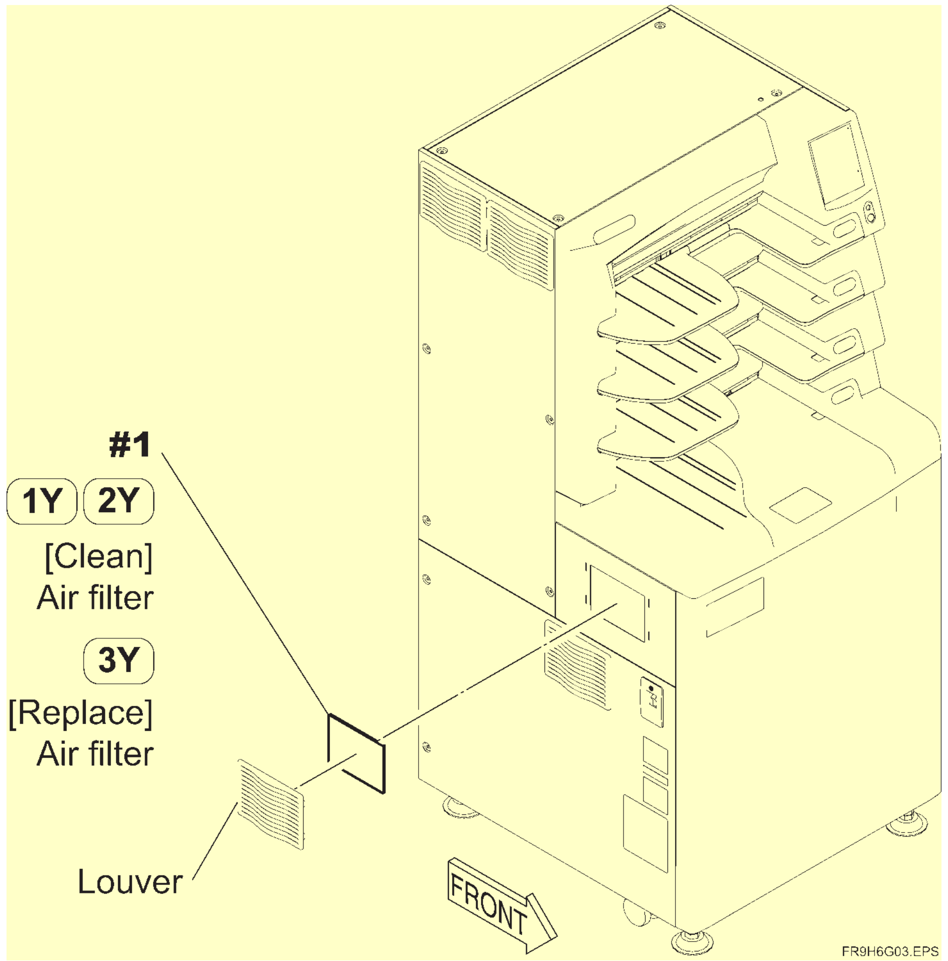
1. **Clean or replace the air filter.**

◆ ***INSTRUCTIONS*** ◆

- *The air filter should be cleaned at intervals of one year.*
- *The air filter should be replaced at intervals of two years.*

◇ *REFERENCE* ◇

The air filter should be cleaned by the user at three months intervals.



19. Securing the Machine

19.1 Connecting the Cables

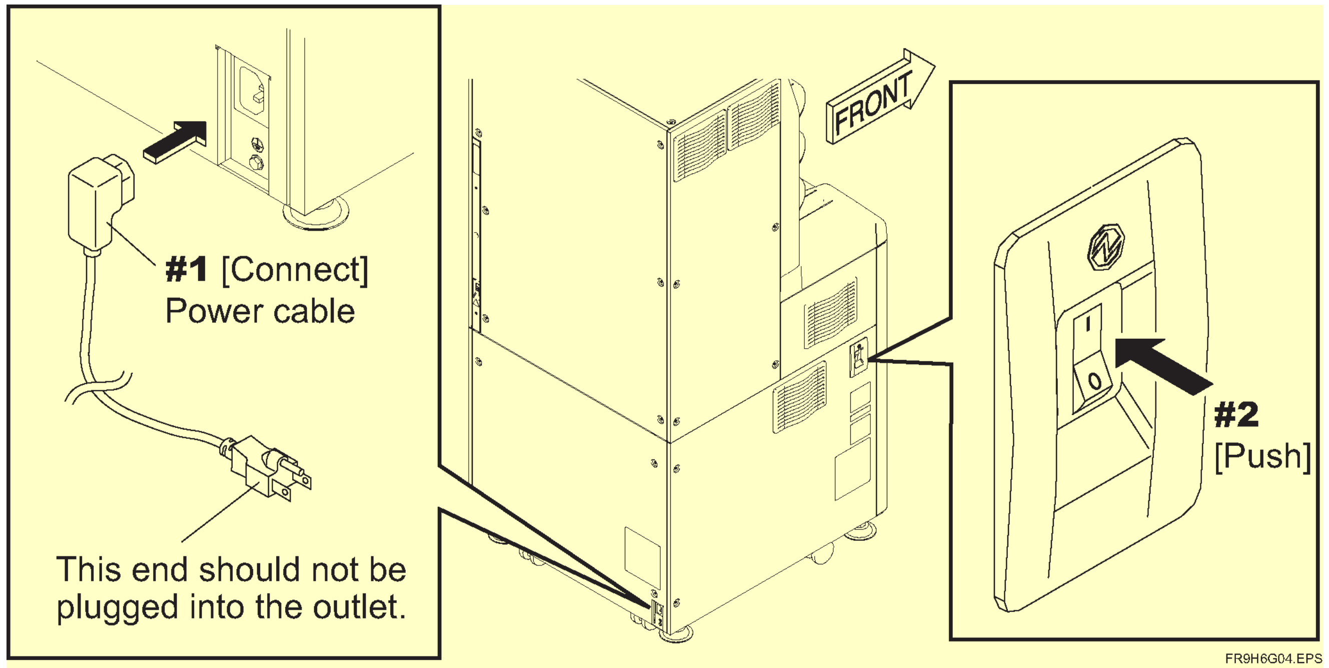
1Y 2Y 3Y

CAUTIONS

- ***Before measuring the resistance value, make sure that the power plug is unplugged from the outlet.***
- ***If the machine is to be installed in the patient environment, see "APPENDIX 1. ADDITIONAL PROTECTIVE GROUNDING."***

  ☞ *{IN: Appendix 1_Additional Protective Grounding}*

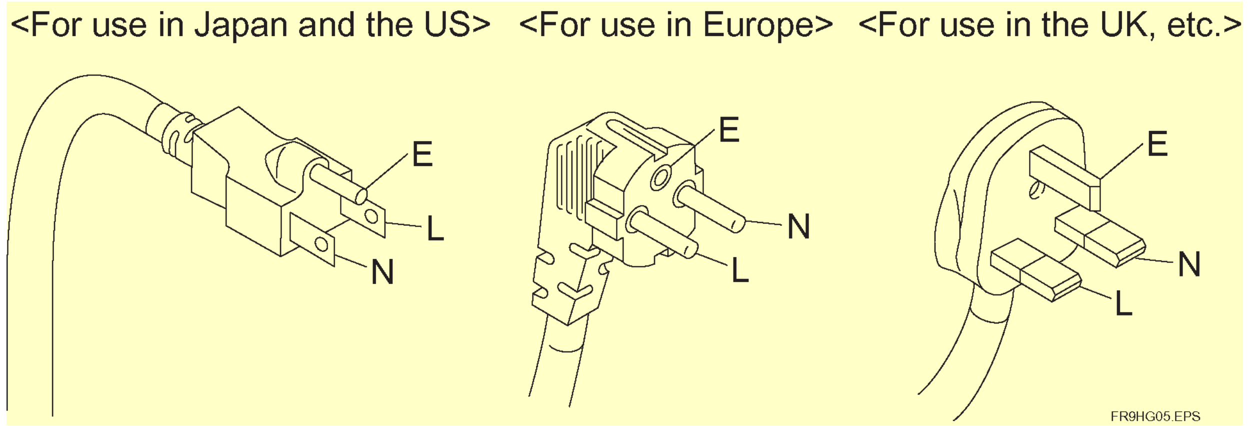
1. **Connect the power cable to the machine, and place the breaker switch in the ON position.**


#1 [Connect]
Power cable
This end should not be plugged into the outlet.
FRONT
#2
[Push]
FR9H6G04.EPS

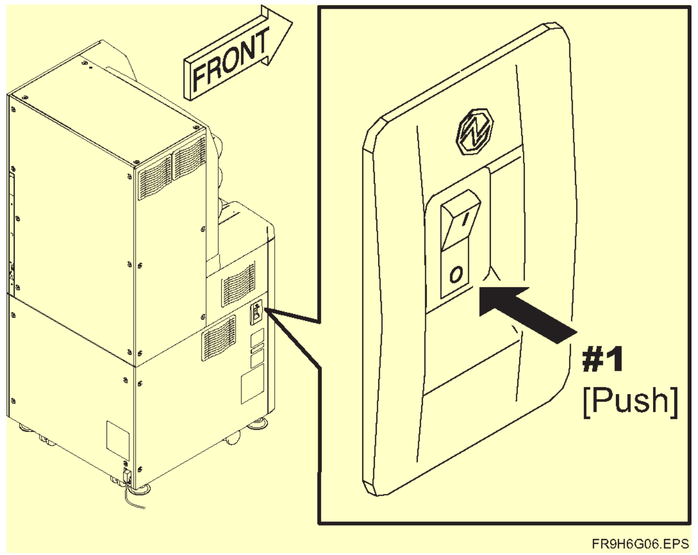
2. **Measure the resistance value of the power cable.**

(Reference value)

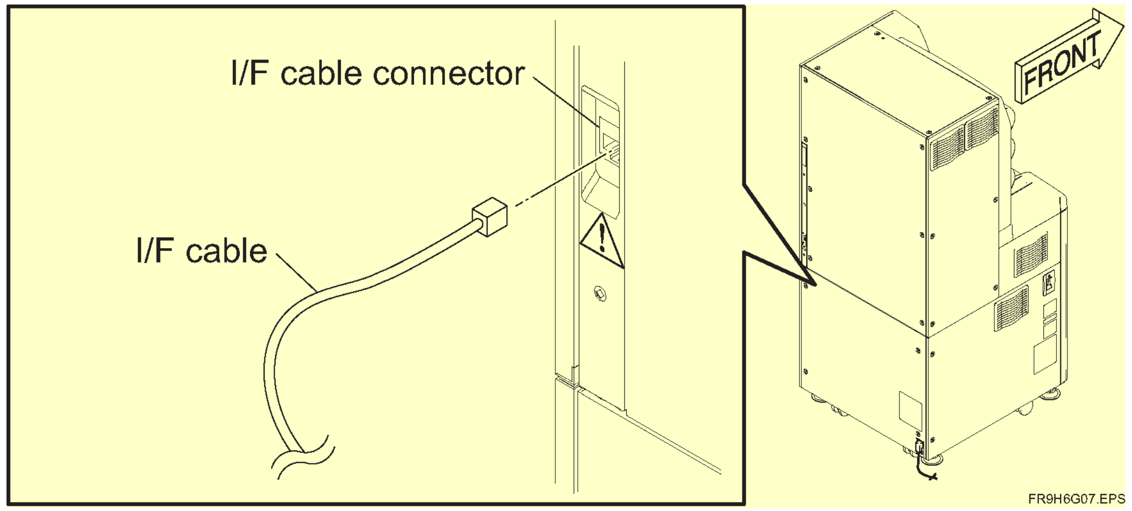
Terminal	L - N	L - E	N - E
Resistance value	100k Ω -	∞	∞


<For use in Japan and the US>
<For use in Europe>
<For use in the UK, etc.>
E
L
N
E
N
L
E
N
L
FR9HG05.EPS

3. **Place the breaker switch in the OFF position.**


FRONT
#1
[Push]
FR9H6G06.EPS

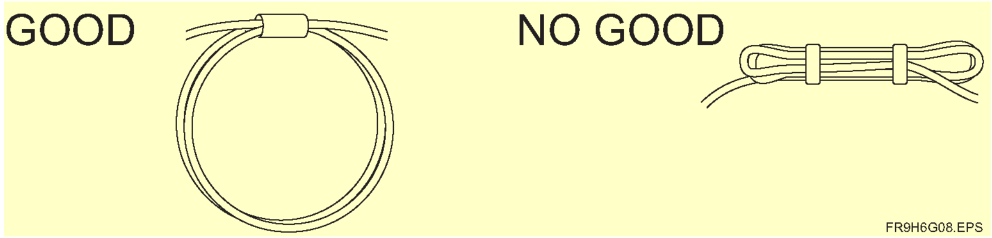
4. **Connect the I/F cable to the I/F cable connector of the machine.**

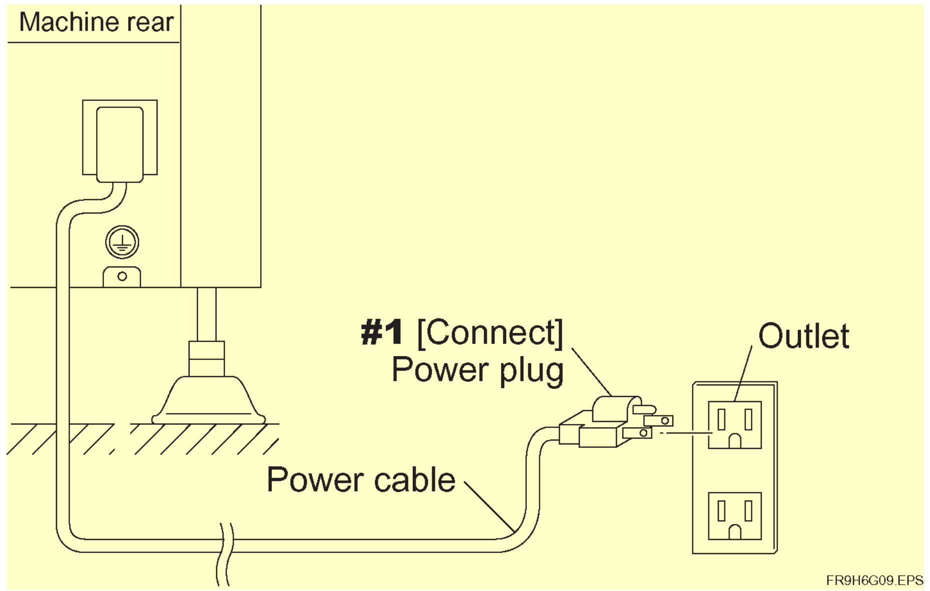

I/F cable connector
I/F cable
FRONT
FR9H6G07.EPS

5. **Plug the power cable into the outlet.**

⚠ **CAUTION**

Do not tie or bundle the power cable in such a manner that it is overloaded.


GOOD
NO GOOD
FR9H6G08.EPS


Machine rear
#1 [Connect]
Power plug
Outlet
Power cable
FR9H6G09.EPS

1Y 2Y 3Y ☞ {PM:19.2}

19.2 Securing the Machine

1Y 2Y 3Y ☞ {PM:19.3}

1. **Secure the machine by reversing the procedures for unlocking the retainers.**

   ☞ {PM:4.1_Unlocking the Retainers}

19.3 Checking for Improper Protective Grounding

1Y 2Y 3Y ☞ {PM:20.}

1. **Check that the power cable and additional protective ground wire connections are established in the same manner as for installation.**

2. **Check that the parts and cables removed for servicing purposes are connected in the same manner as for installation.**

3. **Check to ensure that the screws once removed are snugly retained.**

20. Checking the Image/Conveyance

1Y 2Y 3Y ☞ **{PM:21.}**

1. **Check the image/conveyance.**
   ☞ {PM:3_Checking the Image/Conveyance}

21. Checking the Error Log

1Y 2Y 3Y ☞ **{PM:22.}**

1. **Check the error log.**
   ☞ {PM:2.1_Checking the Error Log}

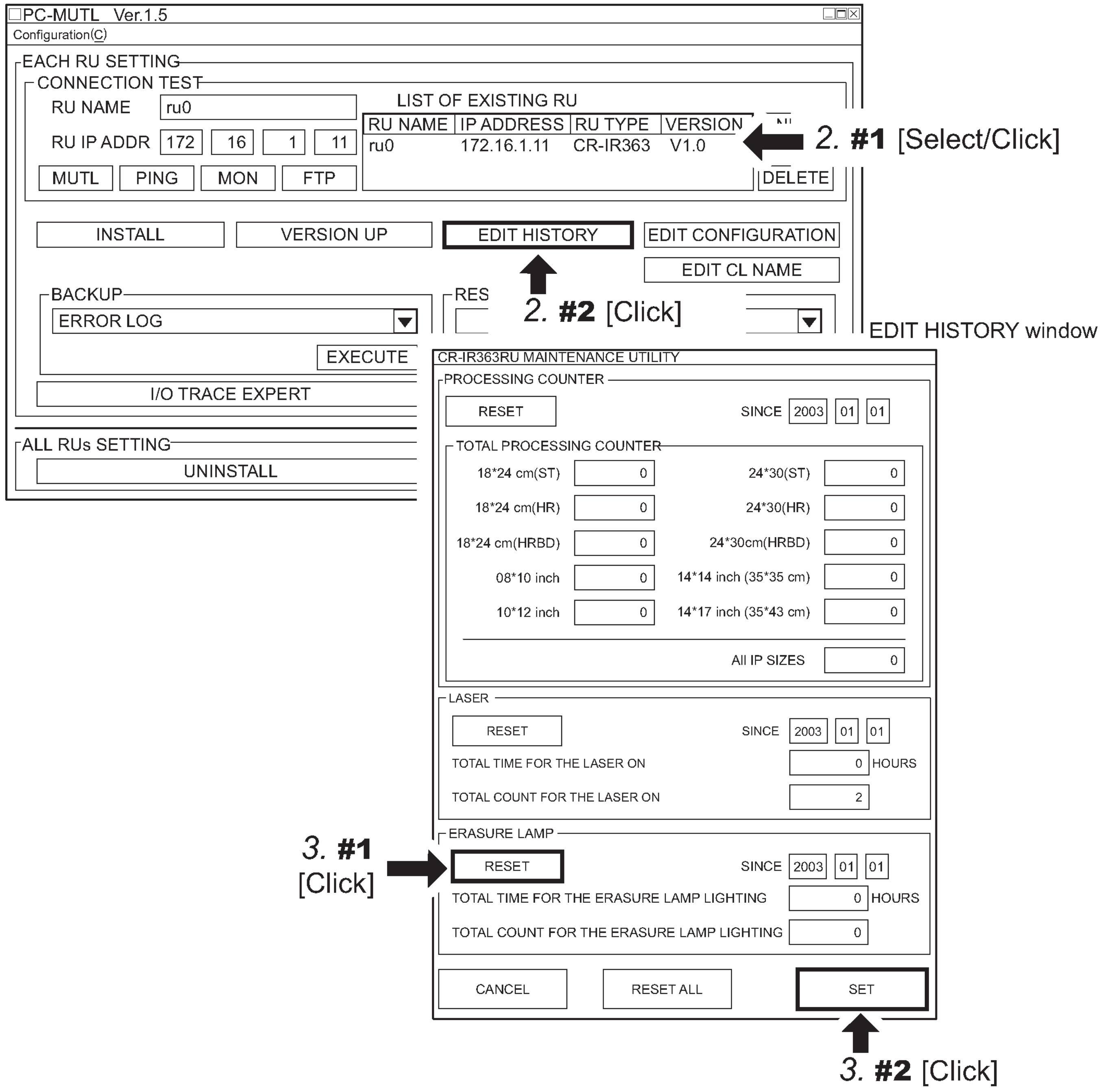
22. Resetting the Erasure Lamp Lighting Time

1Y 2Y 3Y

When the erasure lamps are replaced,be sure to reset the erasure lamp lighting time.

1. **Open the MAINTENANCE UTILITY window.**
2. **Open the EDIT HISTORY window.**
3. **Reset the erasure lamp lighting time.**

MAINTENANCE UTILITY window


PC-MUTL Ver.1.5
Configuration(C)
EACH RU SETTING
CONNECTION TEST
MUTL
PING
MON
FTP
LIST OF EXISTING RU
DELETE
INSTALL
VERSION UP
EDIT HISTORY
EDIT CONFIGURATION
EDIT CL NAME
BACKUP
RES
EXECUTE
I/O TRACE EXPERT
ALL RUs SETTING
UNINSTALL
EDIT HISTORY window
CR-IR363RU MAINTENANCE UTILITY
PROCESSING COUNTER
RESET
TOTAL PROCESSING COUNTER
LASER
RESET
ERASURE LAMP
RESET
CANCEL
RESET ALL
SET

RU NAME ru0
RU IP ADDR 172 16 1 11

RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.11	CR-IR363	V1.0

BACKUP: ERROR LOG

PROCESSING COUNTER SINCE 2003 01 01

18*24 cm(ST)	0	24*30(ST)	0
18*24 cm(HR)	0	24*30(HR)	0
18*24 cm(HRBD)	0	24*30cm(HRBD)	0
08*10 inch	0	14*14 inch (35*35 cm)	0
10*12 inch	0	14*17 inch (35*43 cm)	0
		All IP SIZES	0

LASER SINCE 2003 01 01
TOTAL TIME FOR THE LASER ON 0 HOURS
TOTAL COUNT FOR THE LASER ON 2

ERASURE LAMP SINCE 2003 01 01
TOTAL TIME FOR THE ERASURE LAMP LIGHTING 0 HOURS
TOTAL COUNT FOR THE ERASURE LAMP LIGHTING 0

2. **#1** [Select/Click]

2. **#2** [Click]

3. **#1** [Click]

3. **#2** [Click]

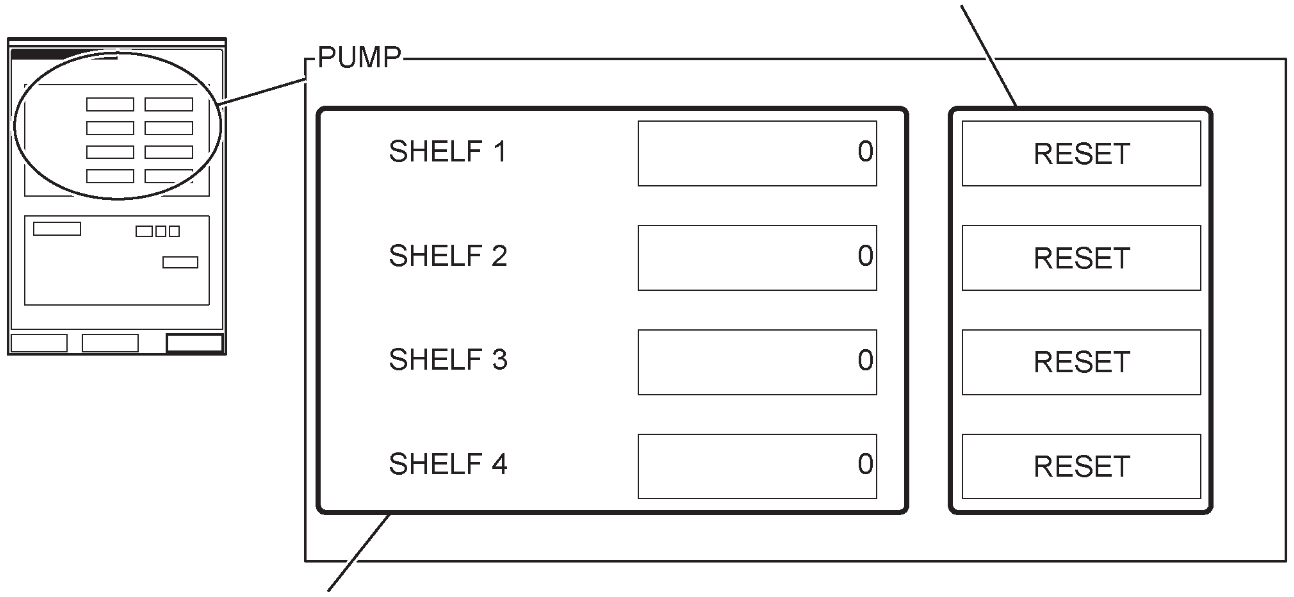
FR□H6018.EPS

23. Reset the number that pumps are used

3Y

1. **Open the EDIT HISTORY window.**

2. **Select the "Minor Change History" tab to reset the number that the pumps are used.**



SHELF 1 0
SHELF 2 0
SHELF 3 0
SHELF 4 0

When it is clicked, the value of "SHELF" (1 - 4) is cleared.

Counters for number of times pump on each shelf has been used.

FR9H6G10.ai

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CR-IR 362 Service Manual

Installation (IN)

Control Sheet

Issue date	Revision number	Reason	Pages affected
08.25.2003	01	New release (FM4098)	All pages
10.10.2003	02	Corrections (FM4160)	13, 23-31, Appx IN-2, 13-18
02.20.2004	03	Corrections (FM4181)	1, 2, 21-35 , Appx IN-3, 8, 18
11.15.2004	04	Corrections (FM4425)	2, 4-31, Appx IN-19, 20
05.10.2005	05	Corrections (FM4610)	Appx IN-8
02.19.2007	07	Change of document number, corrections (FM5097)	All pages
09.30.2008	08	Revision (FM5340)	8, 9, 28-39
09.30.2009	09E	Revision (FM5539)	4, 8-47, Appx IN-14, 19

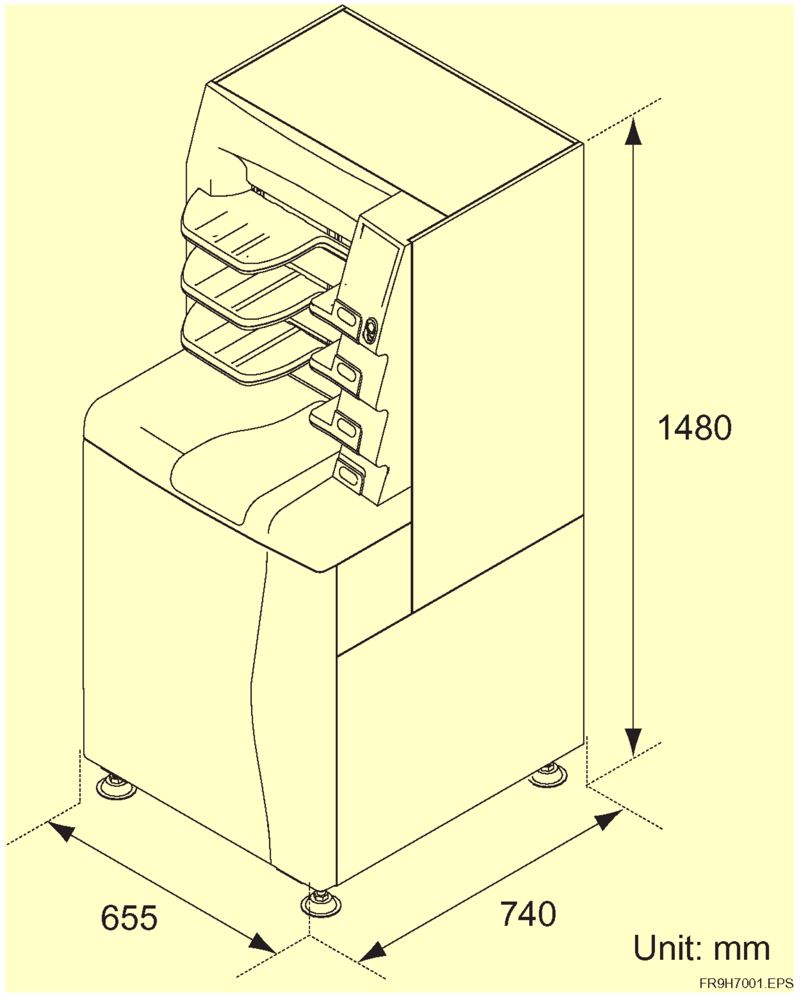
1. Specifications of Machine

■ Product Code

CR-IR 362

■ Dimensions

W655 × D740 × H1480 (mm)


1480
655
740
Unit: mm
FR9H7001.EPS

■ Weight

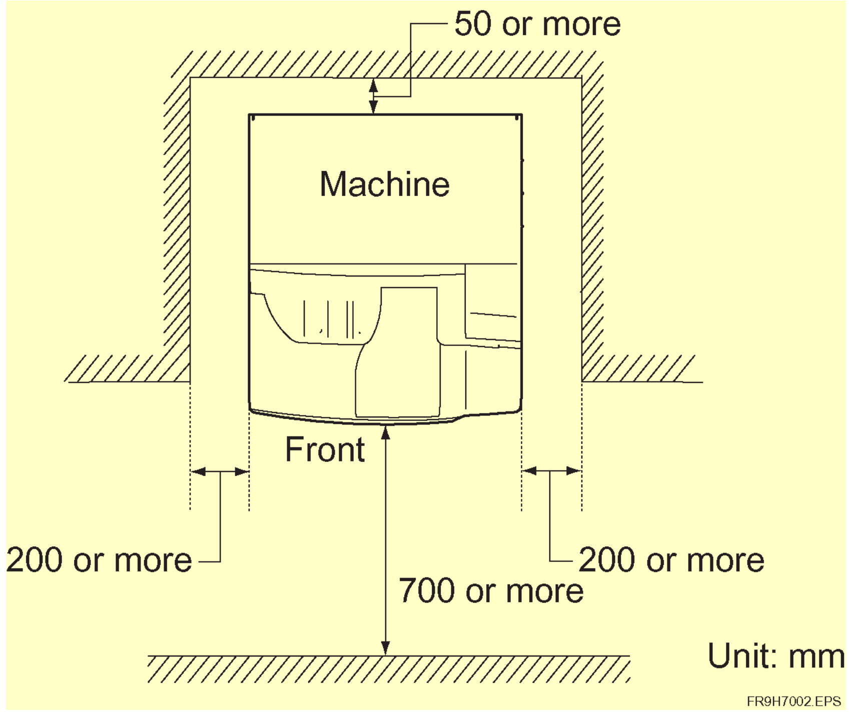
285 kg approx.

■ Means for Moving and Fixing the Machine

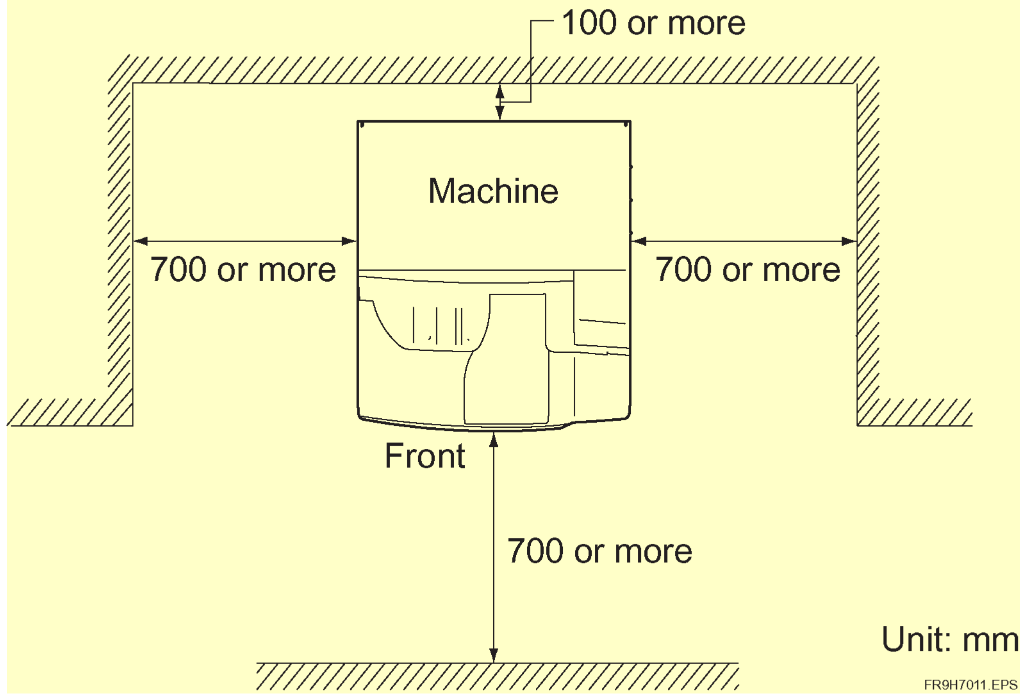
Moving :	Double-wheel caster (variable-direction/no-brake) x4
Fixing :	- Adjustable foot x4 - Machine retainer x2

■ Installation Space

● For fixing by adjustable feet

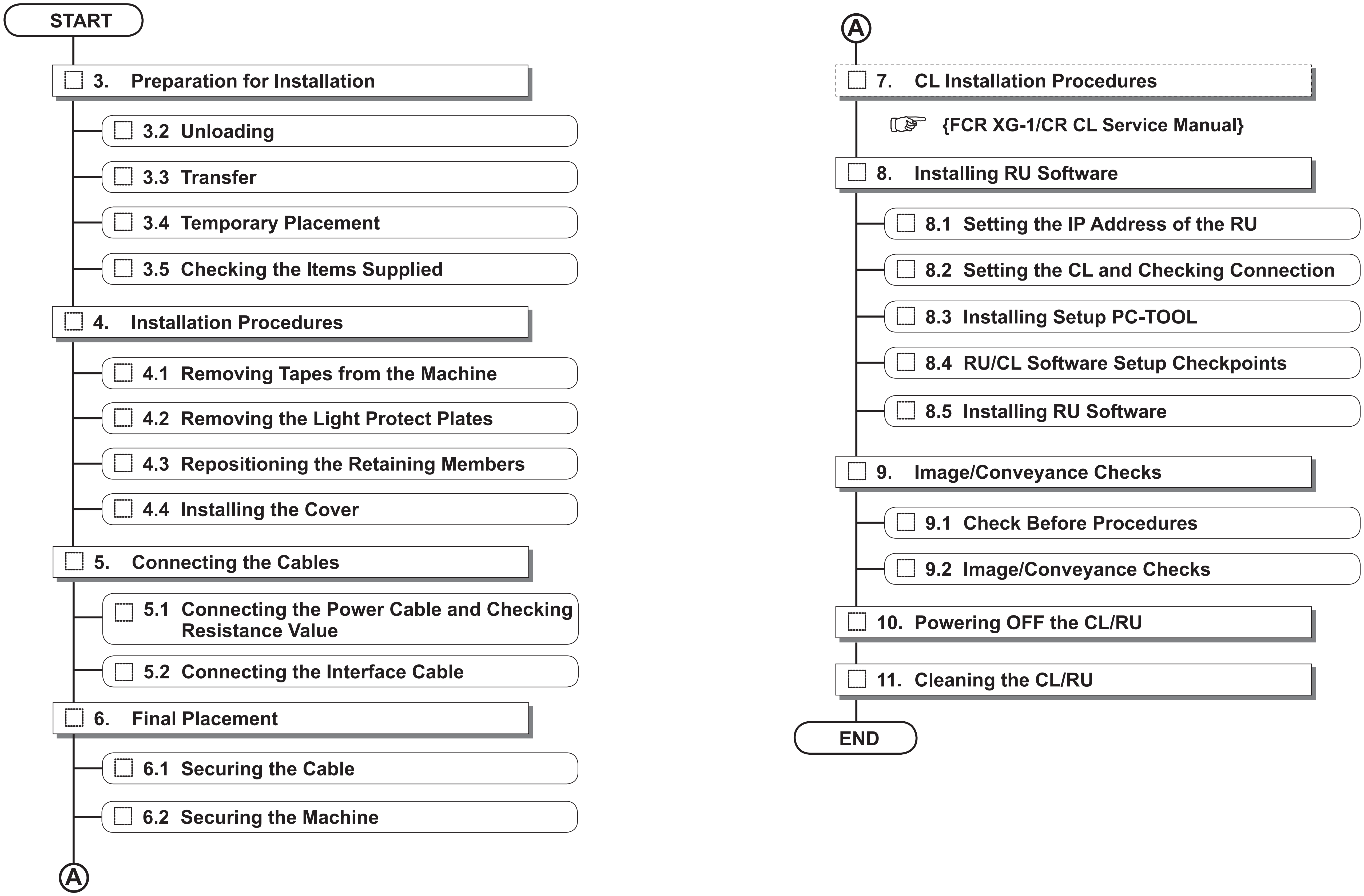

50 or more
Machine
Front
200 or more
200 or more
700 or more
Unit: mm
FR9H7002.EPS

● For fixing by machine retainers


100 or more
Machine
700 or more
700 or more
Front
700 or more
Unit: mm
FR9H7011.EPS

2. Installation Work Flowchart

■ Workflow for First-Time Installation



START

- ☐ 3. Preparation for Installation
  - ☐ 3.2 Unloading
  - ☐ 3.3 Transfer
  - ☐ 3.4 Temporary Placement
  - ☐ 3.5 Checking the Items Supplied
- ☐ 4. Installation Procedures
  - ☐ 4.1 Removing Tapes from the Machine
  - ☐ 4.2 Removing the Light Protect Plates
  - ☐ 4.3 Repositioning the Retaining Members
  - ☐ 4.4 Installing the Cover
- ☐ 5. Connecting the Cables
  - ☐ 5.1 Connecting the Power Cable and Checking Resistance Value
  - ☐ 5.2 Connecting the Interface Cable
- ☐ 6. Final Placement
  - ☐ 6.1 Securing the Cable
  - ☐ 6.2 Securing the Machine

Ⓐ

Ⓐ

- ☐ 7. CL Installation Procedures
  - ☞ {FCR XG-1/CR CL Service Manual}
- ☐ 8. Installing RU Software
  - ☐ 8.1 Setting the IP Address of the RU
  - ☐ 8.2 Setting the CL and Checking Connection
  - ☐ 8.3 Installing Setup PC-TOOL
  - ☐ 8.4 RU/CL Software Setup Checkpoints
  - ☐ 8.5 Installing RU Software
- ☐ 9. Image/Conveyance Checks
  - ☐ 9.1 Check Before Procedures
  - ☐ 9.2 Image/Conveyance Checks
- ☐ 10. Powering OFF the CL/RU
- ☐ 11. Cleaning the CL/RU

END

3. Preparation for Installation

3.1 Precautions Regarding Installation

The place where the machine is to be installed needs to meet the criteria set forth in "Getting Started" and "3.1.1 Installation Site Requirements. "Preinstallation procedures should be performed beforehand for necessary construction work, electrical work, and air-conditioning system installation.

3.1.1 Installation Site Requirements

Avoid the following installation sites:

- Places where the temperature changes drastically.
- Places near heat sources such as heaters.
- Places where water leakage or equipment submersion may occur.
- Places where corrosive gas may be generated.
- Dusty places.
- Places where the machine is subject to constant or excessive vibration or shock.
- Places that are exposed to direct sunlight.
- Places that are exposed to X-rays while the machine is processing.
  Make sure that the machine will never be exposed to direct and scattered X-rays while the machine is processing.
  The size and position of the X-ray shields should be such that the machine is completely shielded to avoid exposure of direct and scattered X-rays to the machine.

● **When installed in the patient environment**

In the room where the machine is to be installed, the hospital-grade grounding terminal and outlet should be provided.
The installation place should be within reach of the cable of the patient environment support cable kit from the hospital-grade grounding terminal and outlet.

● **When installed in other than the patient environment**

Make sure that persons other than routine operators of the machine will not touch the machine inadvertently.

3.1.2 Precautions on Patient Environment

■ **Additional Protective Grounding**

If the RU is installed in the patient environment with the connected equipment in the non-medically used room, the additional protective grounding will be required.
Definitions of "patient environment", "medically-used room", and "non-medically used room" are given below.

● **Patient Environment**

Patient environment is the area for the patient to receive medical procedures (treatment, tests, diagnosis, monitoring).It is the space measuring 2.5 m in all four directions and 2.5 m in height from the area of the patient's body.
It excludes the space traveled by the patient to reach the medically-used room.

● **Medically-Used Room**

Room equipped with protective grounding (medical use outlet or medical use grounding terminal) implemented by the medical grounding method. The protective grounding inside the medically-used room is equipotential, and the protective grounding of this medically-used room is equipotential to that in the other medically-used room.
Generally, a portion of the medically-used room is the patient environment.

● **Non-Medically Used Room**

Areas outside the medically-used room are considered the non-medically used room.

3.1.3 Handling Precautions for Printed Circuit Boards and Optical Unit

When servicing a board or optical unit, use a wristband to ground your body.
If you body is not grounded, the electrostatic buildup on your body may damage the electronic parts.

3.1.4 Precautions for System Connection

"Accessory equipment connected to be the analog and digital interfaces must be certified according to the respective IEC Standards. Furthermore all configurations shall comply with the medical system standard, IEC60601-1-1. Everyone who connects additional equipment configures a medical system, and is therefore responsible that the system complies with the requirements of IEC60601-1-1. If in doubt consult with the your local technical service representative."

3.2 Unloading

CAUTIONS

- ***When unloading the machine, two persons should always cooperate to do so.***
- ***Before unloading the machine, secure a proper machine transfer route.***

3.2.1 Unloading (#20001 or Later)

◇ *REFERENCE* ◇

- *Before unloading the machine, together with the carrier pallet, from the load-carrying platform of the truck, make sure that there is enough space (2700 mm or more) on the rear side of the machine.*
- The specifications of the crate have changed for machines of #20690 or later.

The changes are as follows:

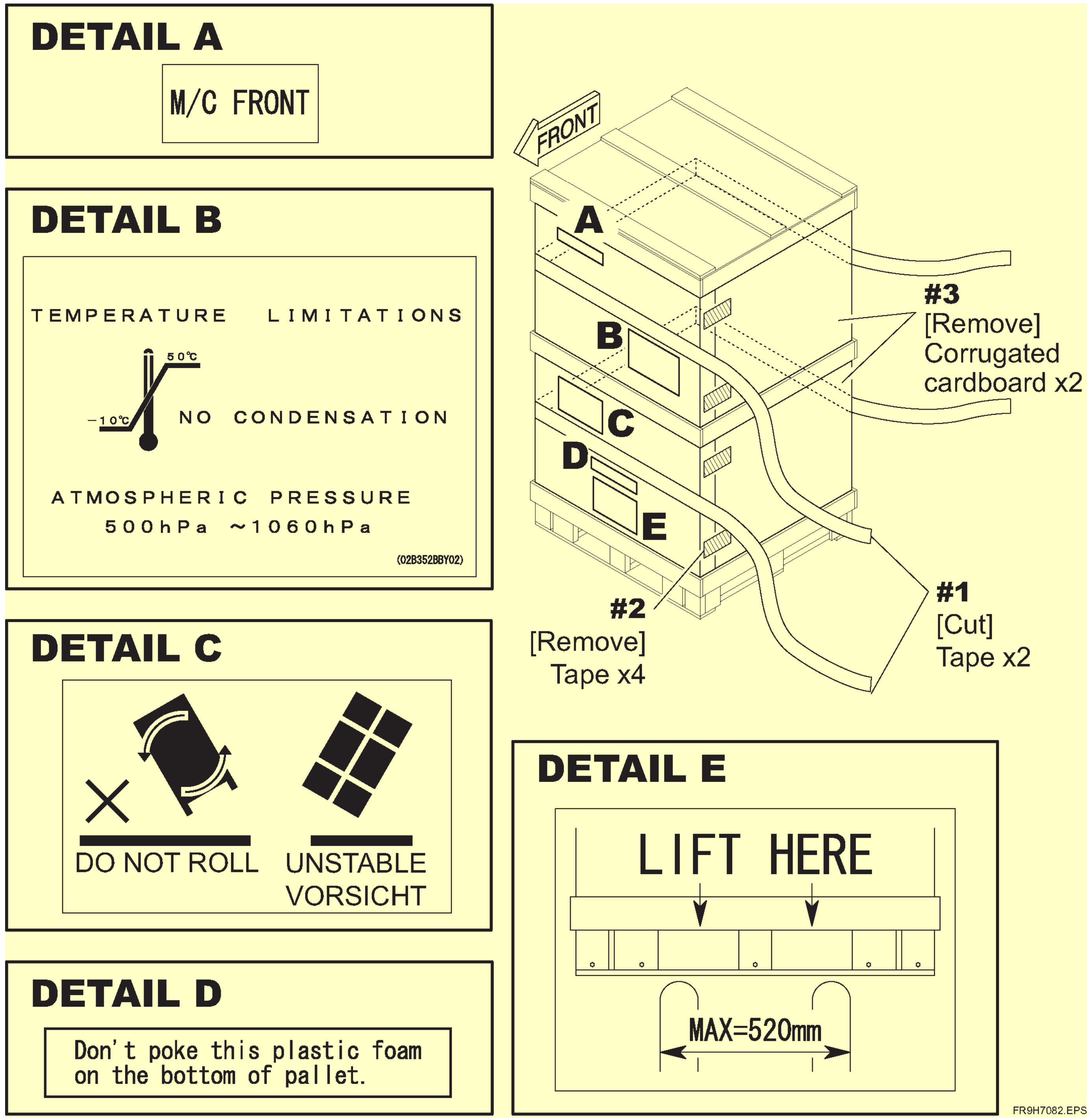
1. *The protective plates and the lift insertion instruction labels are added to the front and rear faces on the lower part of the crate.*
2. *The PP band which retains wooden material of the carrier pallet with the shock absorber is changed to a cable member and the retaining location is changed.*
3. *Wooden materials are added to four corners inside the crate.*

When you see the detail of changes, refer to “Appendix 5. Changes in the Packaging Specifications”.

☞ *{IN: Appendix 5._Changes in the Packaging Specifications}*

1. **Move down the machine together with the carrier pallet from the load-carrying platform of the truck.**

2. **Remove the corrugated cardboards.**

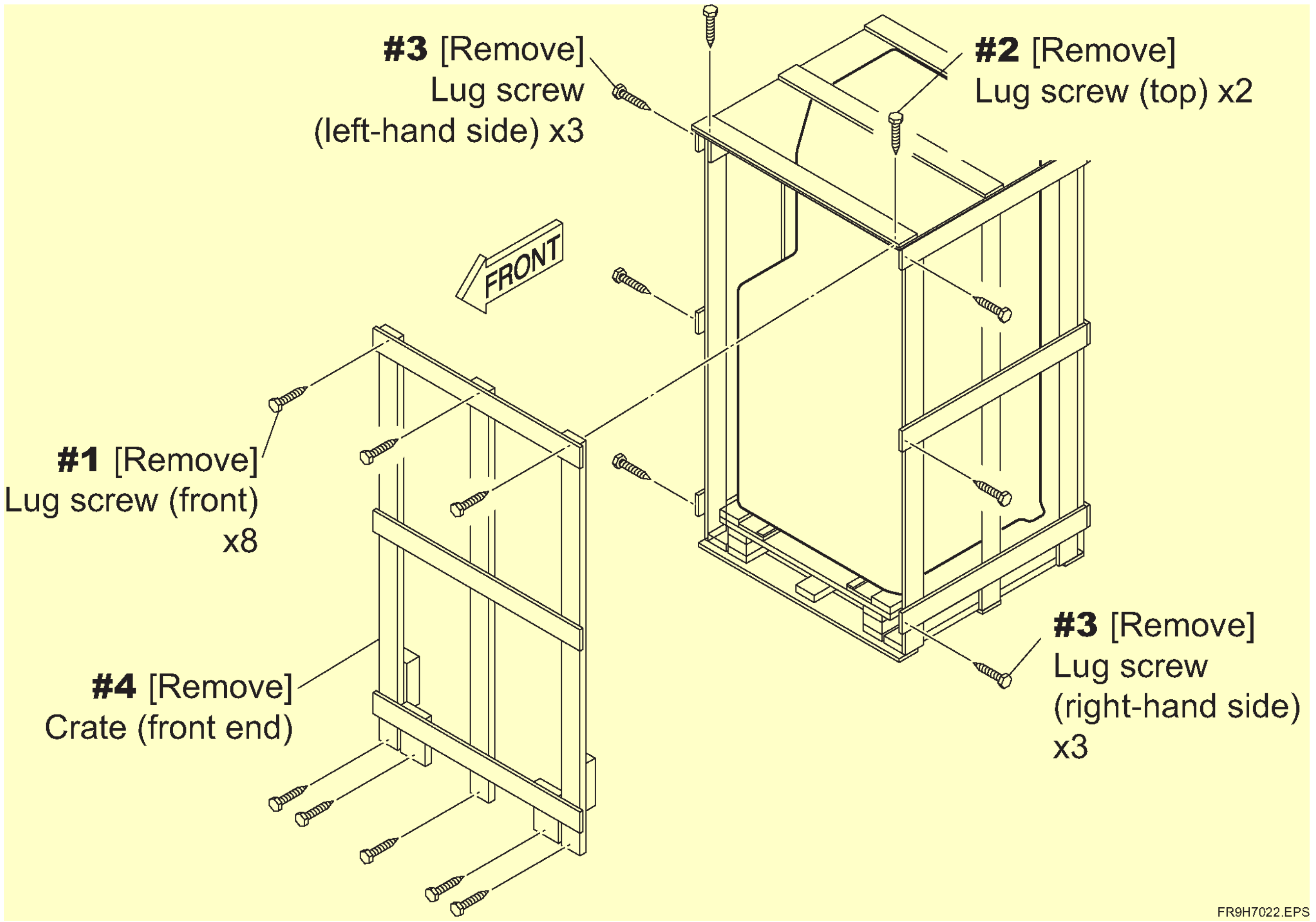

DETAIL A
M/C FRONT
DETAIL B
TEMPERATURE LIMITATIONS
50℃
−10℃
NO CONDENSATION
ATMOSPHERIC PRESSURE
500hPa ~1060hPa
(02B352BBY02)
DETAIL C
DO NOT ROLL
UNSTABLE
VORSICHT
DETAIL D
Don't poke this plastic foam on the bottom of pallet.
FRONT
A
B
C
D
E
#3
[Remove]
Corrugated cardboard x2
#2
[Remove]
Tape x4
#1
[Cut]
Tape x2
DETAIL E
LIFT HERE
MAX=520mm

FR9H7082.EPS

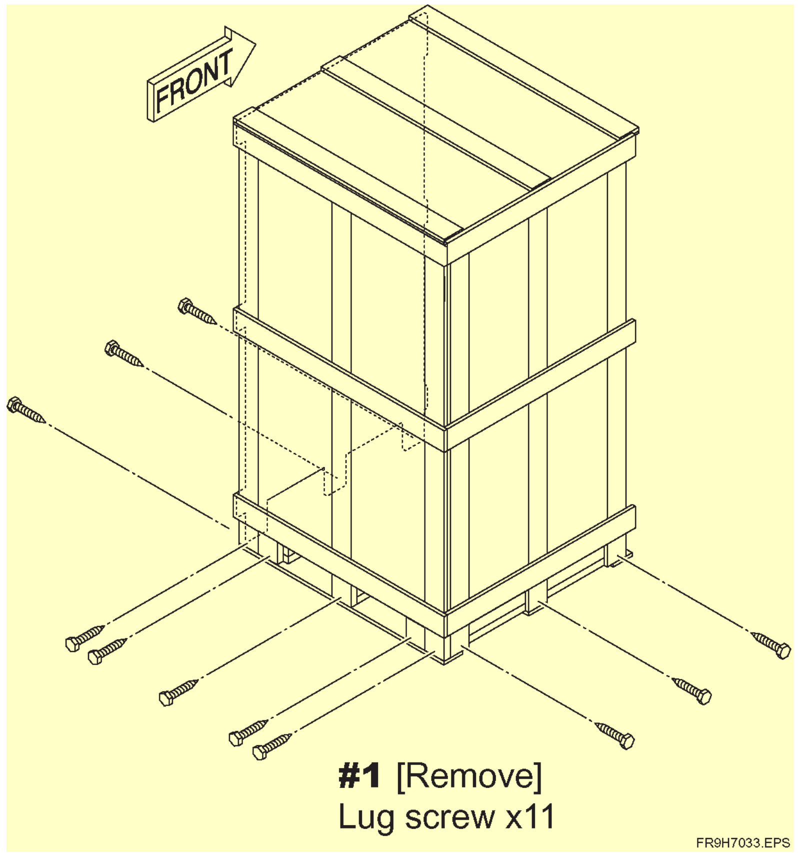
3. Remove the front end of the crate.

◆ **NOTES** ◆

- *The six lug screws located on the front should be removed first. Otherwise, the crate may topple down, causing you injury.*
- *The removed crate should be moved away to an unobstructive place.*


#3 [Remove]
Lug screw
(left-hand side) x3
#2 [Remove]
Lug screw (top) x2
FRONT
#1 [Remove]
Lug screw (front)
x8
#4 [Remove]
Crate (front end)
#3 [Remove]
Lug screw
(right-hand side)
x3
FR9H7022.EPS

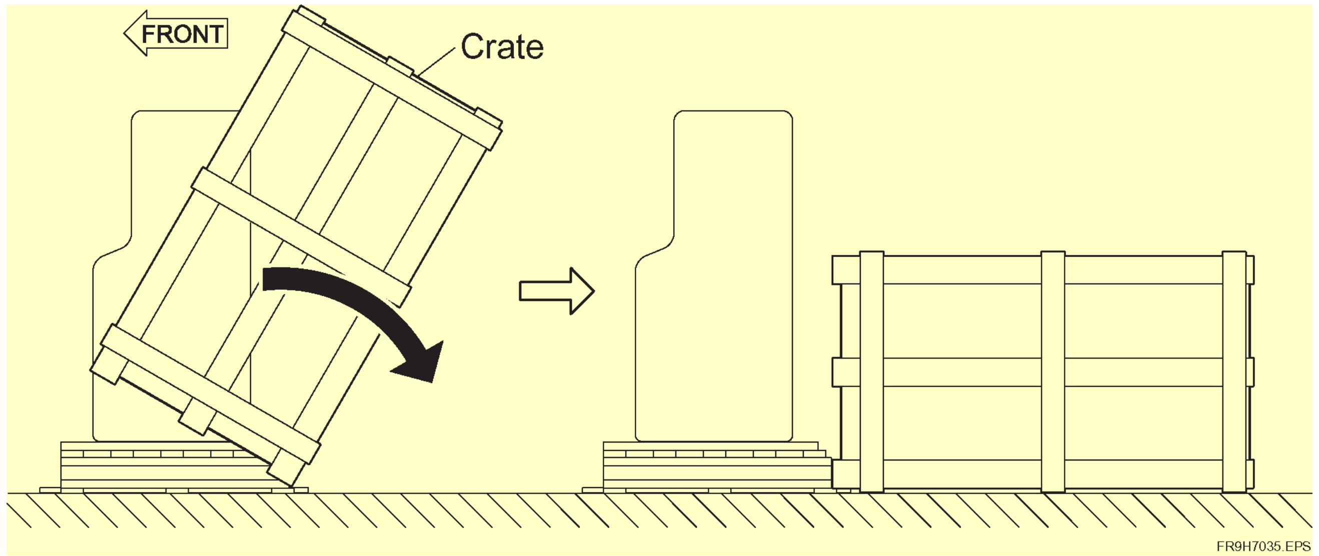
4. Remove the screws from the crate.


FRONT
#1 [Remove]
Lug screw x11
FR9H7033.EPS

5. Incline the crate to take it out.

CAUTION

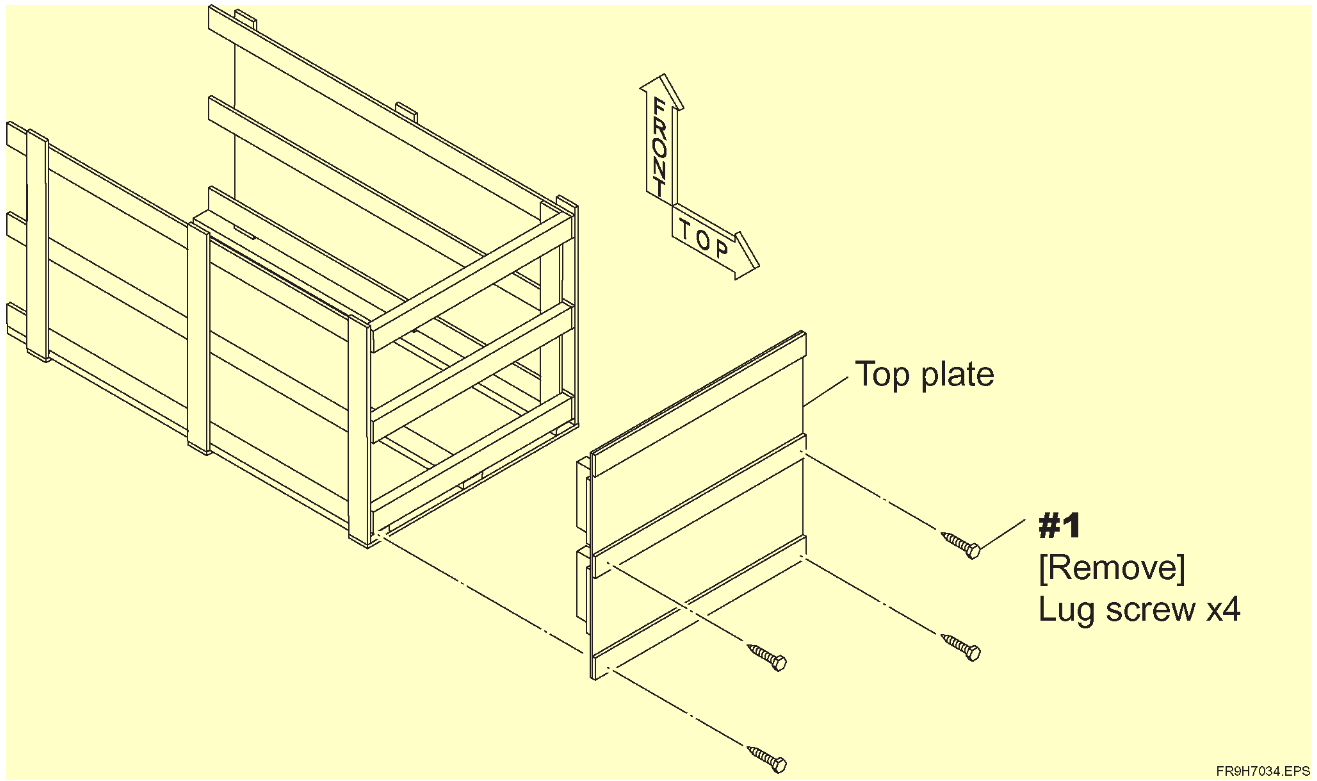
When removing the crate, incline the crate to take it out. If you try to move the crate, it might hit the machine, thereby damaging the machine.


FRONT
Crate
FR9H7035.EPS

6. Remove the top plate from the crate.

CAUTION

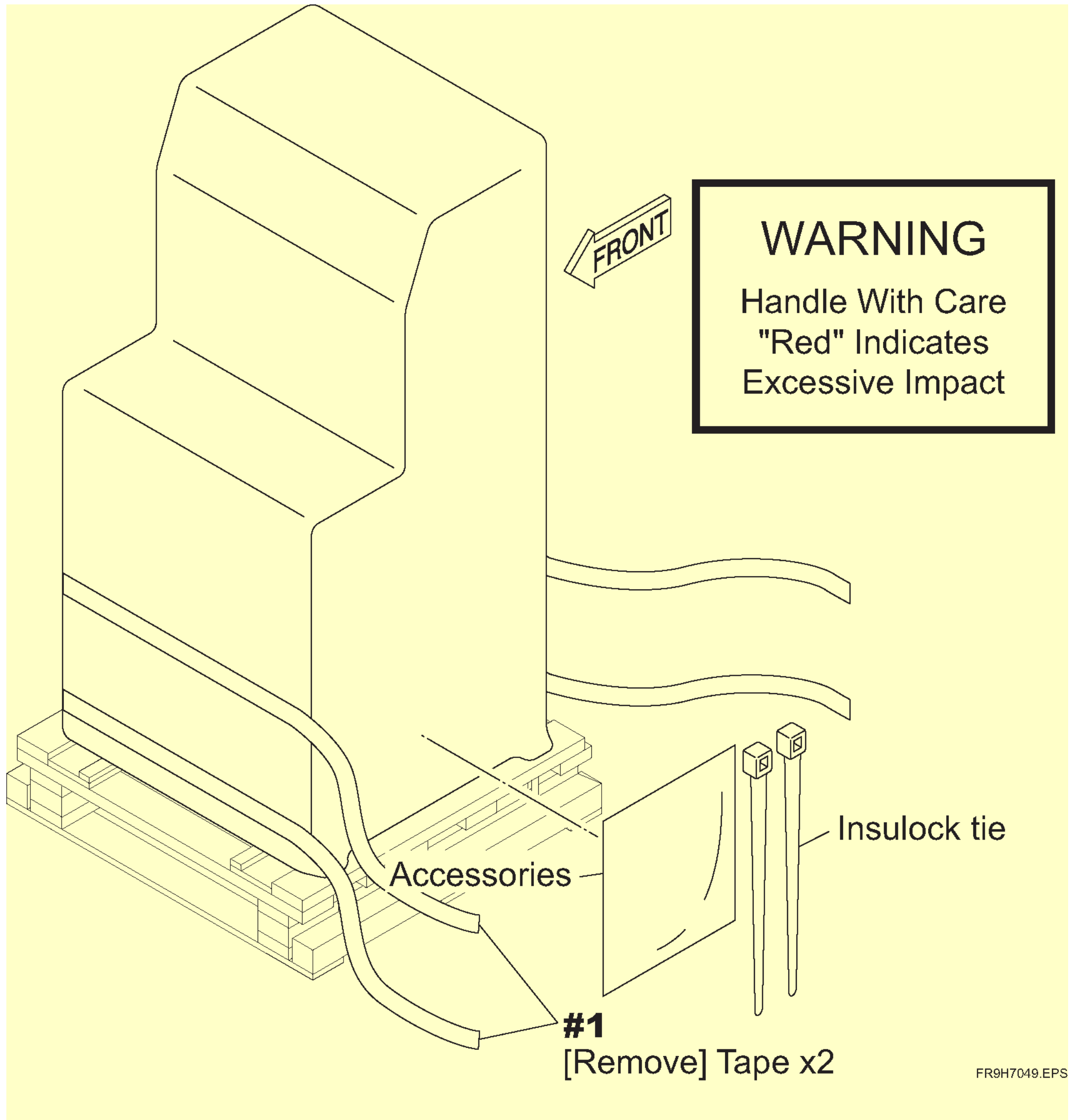
The top plate should not be disassembled, because it will be used when lowering the machine from the carrier pallet.


FRONT
TOP
Top plate
#1
[Remove]
Lug screw x4
FR9H7034.EPS

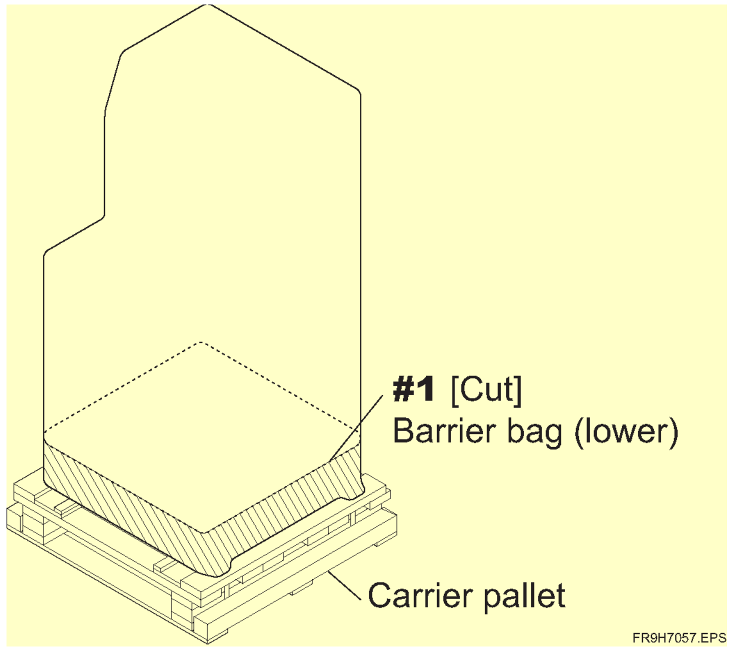
◇ *REFERENCES* ◇

- *After the top plate is removed, break up the crate and put the resulting pieces together for conveyance.*
- *Because the crate is assembled with nails, hit it with a hammer or the like from inside to break up the crate.*
- *Use care not to get injured by protruding nails when breaking up the crate.*

7. Remove the accessories-containing bug.


FRONT
WARNING
Handle With Care
"Red" Indicates
Excessive Impact
Insulock tie
Accessories
#1
[Remove] Tape x2
FR9H7049.EPS

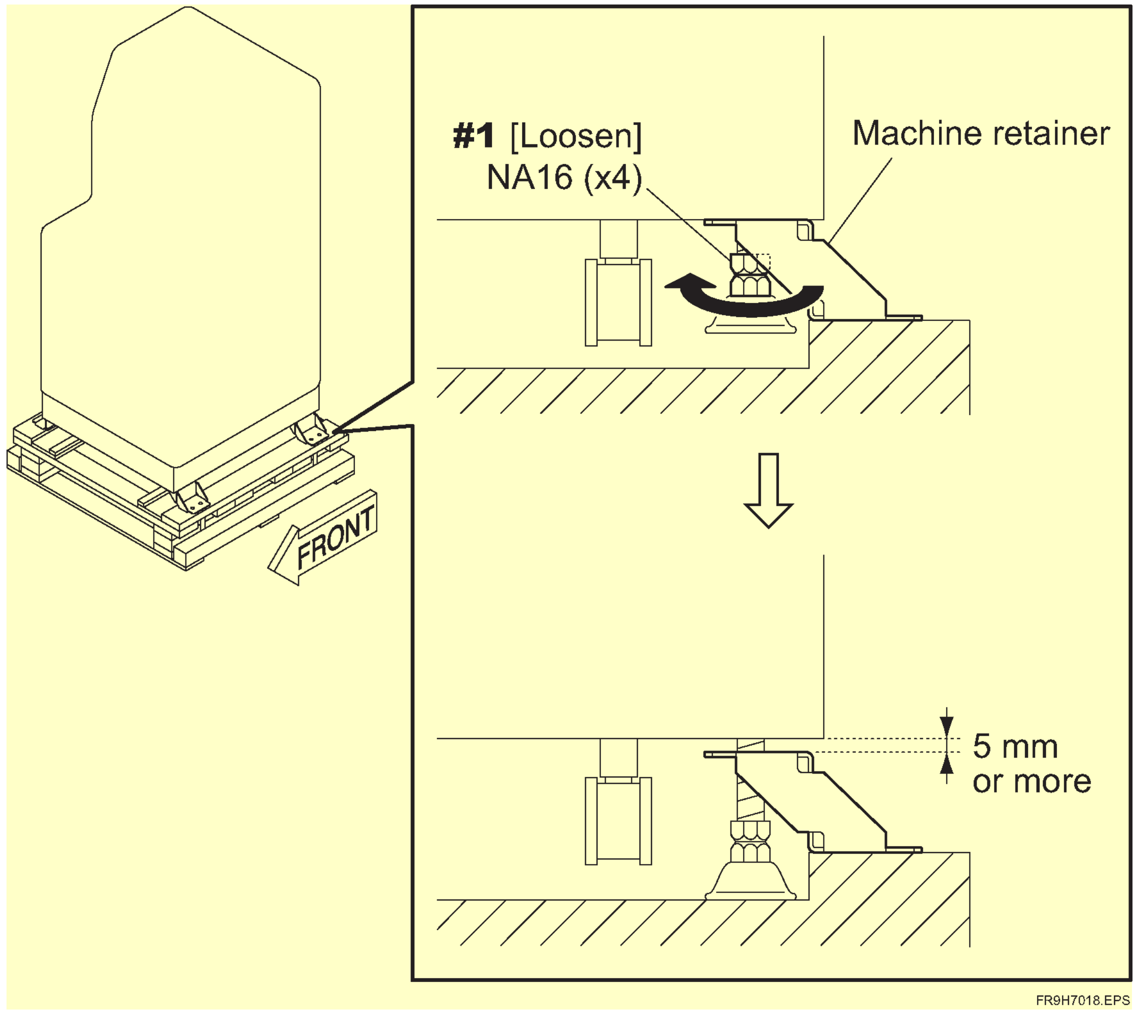
8. Remove the lower portion of the barrier bag that protects the machine.


#1 [Cut]
Barrier bag (lower)
Carrier pallet
FR9H7057.EPS

9. Lower the adjustable feet bolts to lift up the machine.

⚠ **CAUTION**

Unless the machine is lifted up by the adjustable feet, the machine retainers could not be removed.

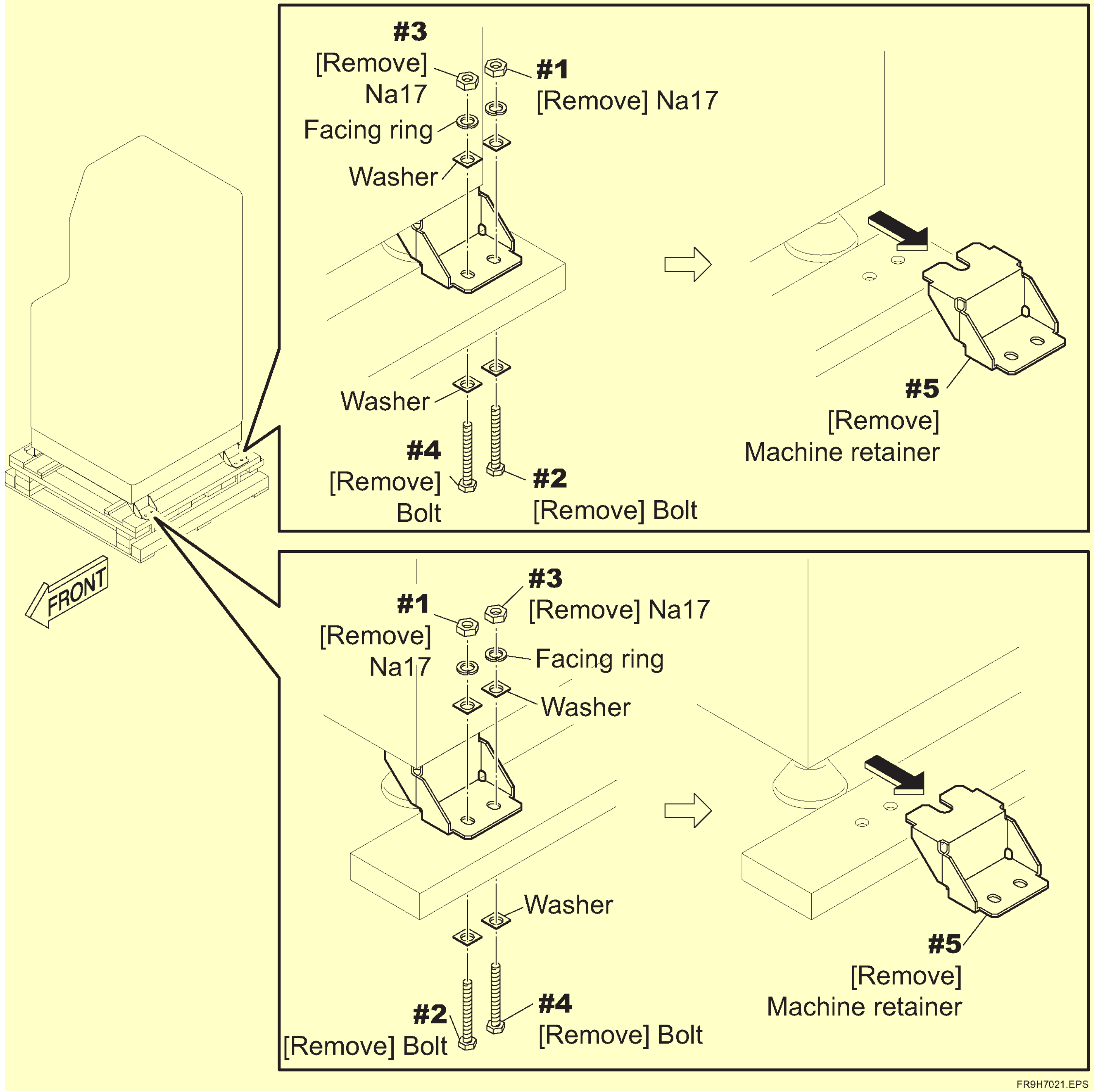

#1 [Loosen]
NA16 (x4)
Machine retainer
5 mm
or more
FRONT
FR9H7018.EPS

10. Remove the machine retainers on the right-hand side.

When the four nuts are loosened, the machine retainers lower accordingly, so that the machine moves down onto the carrier pallet.

⚠ **CAUTION**

When the nut is loosened, the machine may incline by its own weight. So, use care not to get your finger pinched by the machine retainer or adjustable foot.

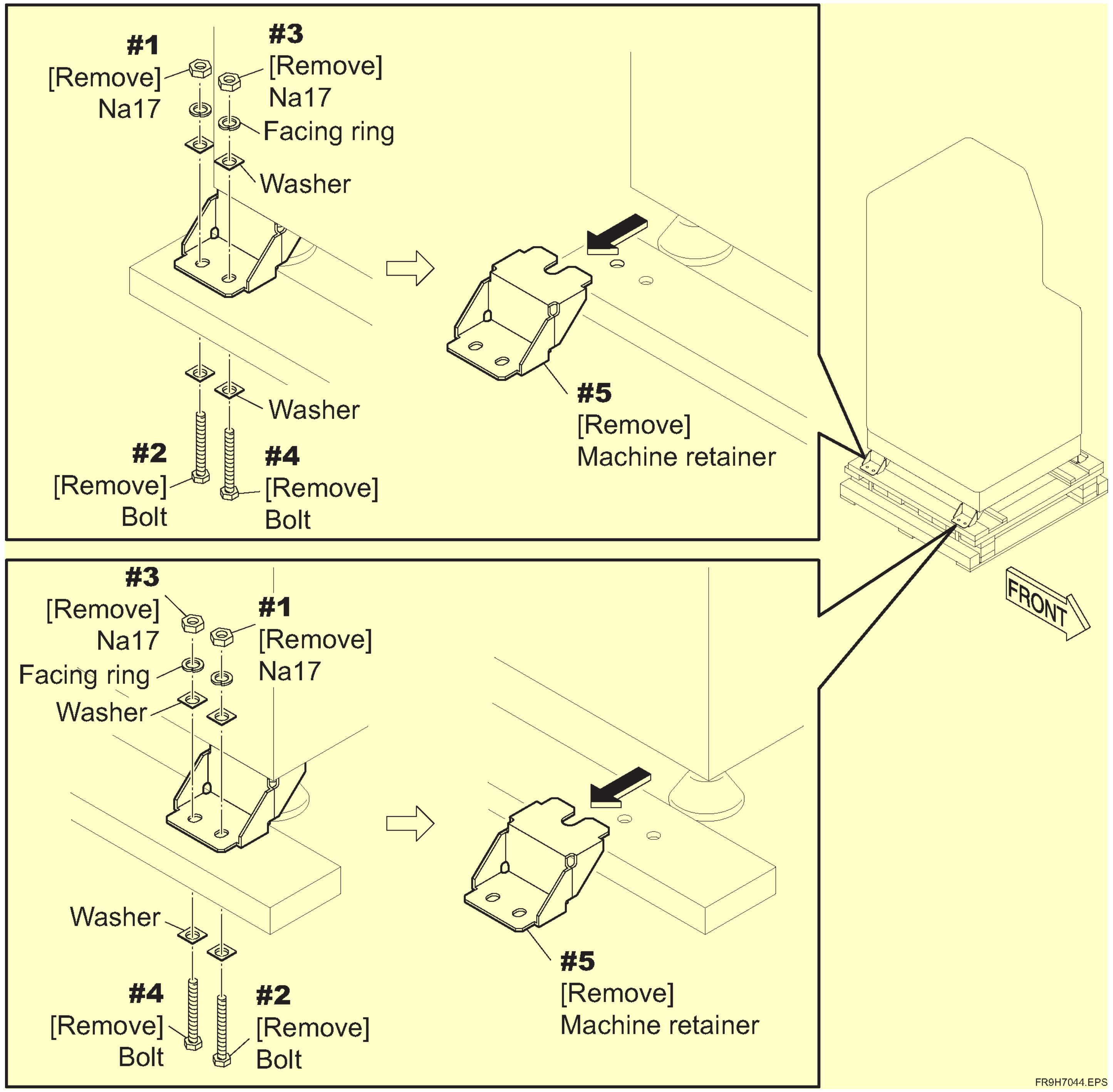

#3
[Remove]
Na17
Facing ring
Washer
#1
[Remove] Na17
Washer
#4
[Remove]
Bolt
#2
[Remove] Bolt
#5
[Remove]
Machine retainer
FRONT
#1
[Remove]
Na17
#3
[Remove] Na17
Facing ring
Washer
Washer
#2
[Remove] Bolt
#4
[Remove] Bolt
#5
[Remove]
Machine retainer
FR9H7021.EPS

11. Remove the machine retainers on the left-hand side.

When the four nuts are loosened, the machine retainers lower accordingly, so that the machine moves down onto the carrier pallet.

CAUTION

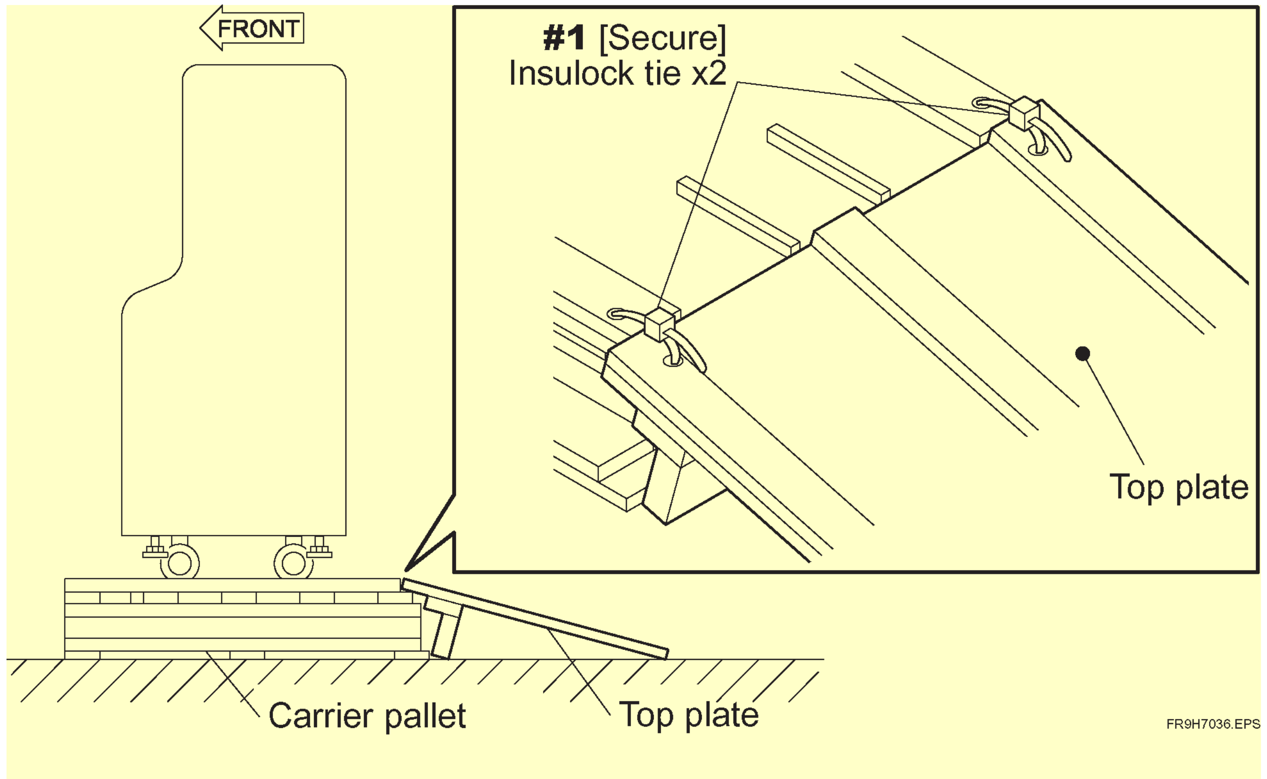
When the nut is loosened, the machine may incline by its own weight. So, use care not to get your finger pinched by the machine retainer or adjustable foot.


#1
[Remove]
Na17
#3
[Remove]
Na17
Facing ring
Washer
Washer
#2
[Remove]
Bolt
#4
[Remove]
Bolt
#5
[Remove]
Machine retainer
FRONT
#3
[Remove]
Na17
Facing ring
Washer
#1
[Remove]
Na17
Washer
#4
[Remove]
Bolt
#2
[Remove]
Bolt
#5
[Remove]
Machine retainer
FR9H7044.EPS

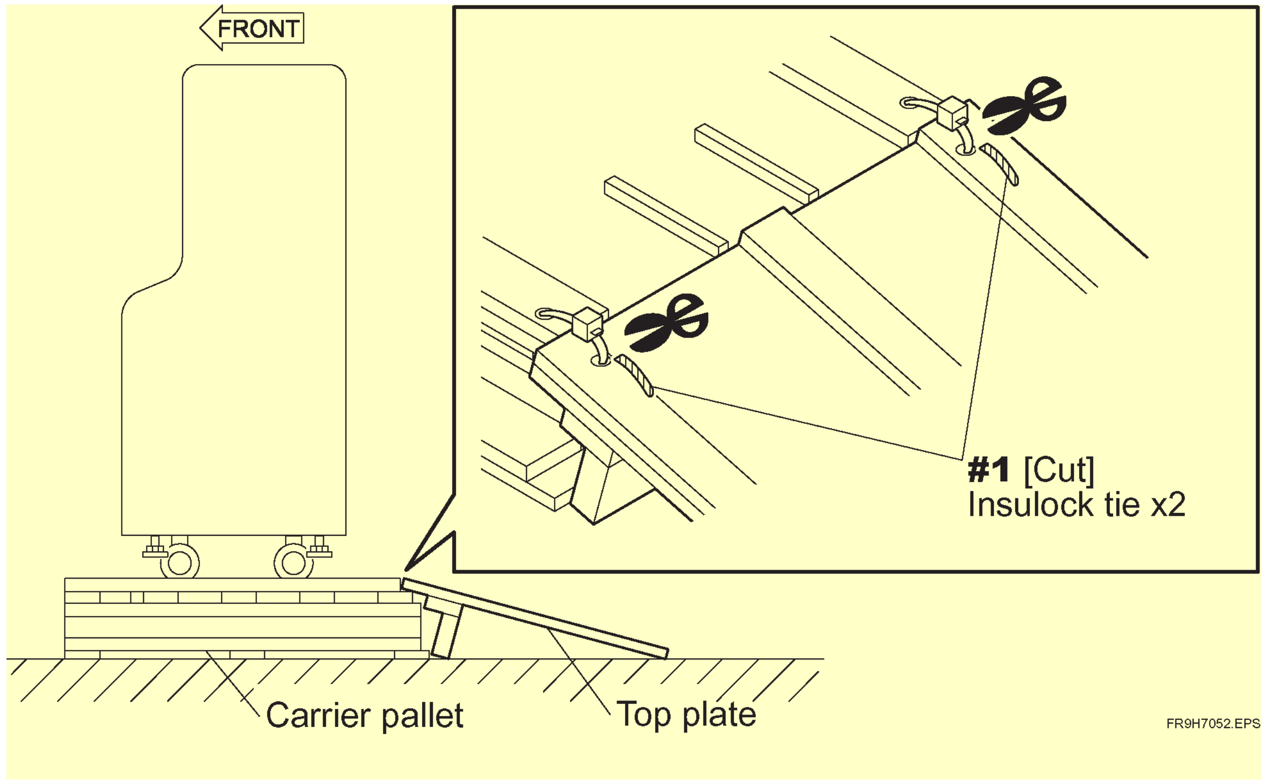
12. Secure the top plate removed at step 6 onto the carrier pallet.

CAUTIONS

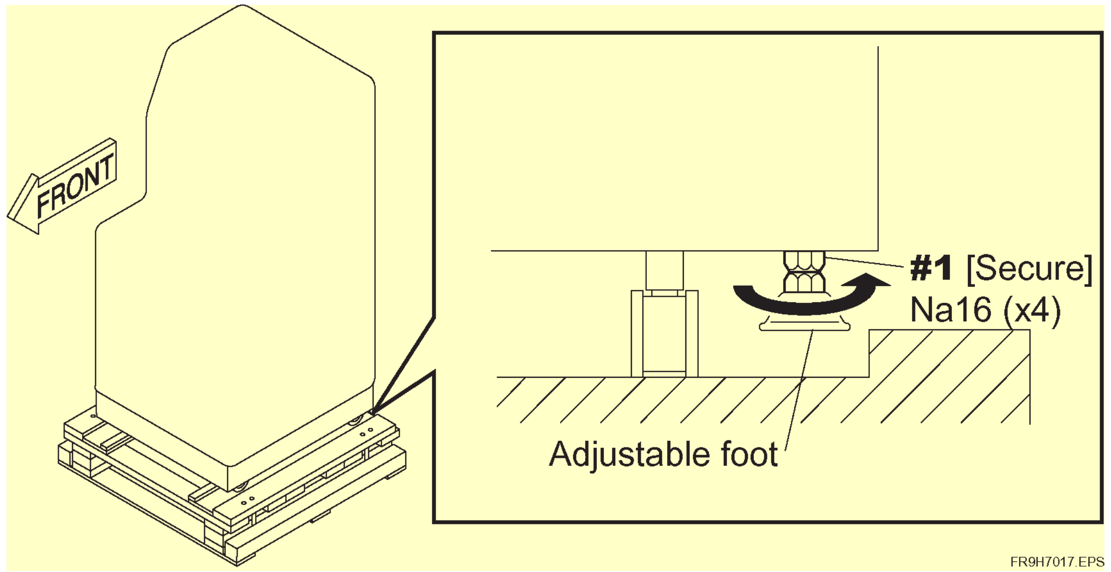
- ***Use the insulock ties to fix the top plate onto the carrier pallet securely.***
- ***Be sure to secure the top plate on the rear side of the machine. The carrier pallet is designed so that the top plate cannot be secured on the front side of the machine.***


FRONT
#1 [Secure]
Insulock tie x2
Top plate
Carrier pallet
Top plate
FR9H7036.EPS

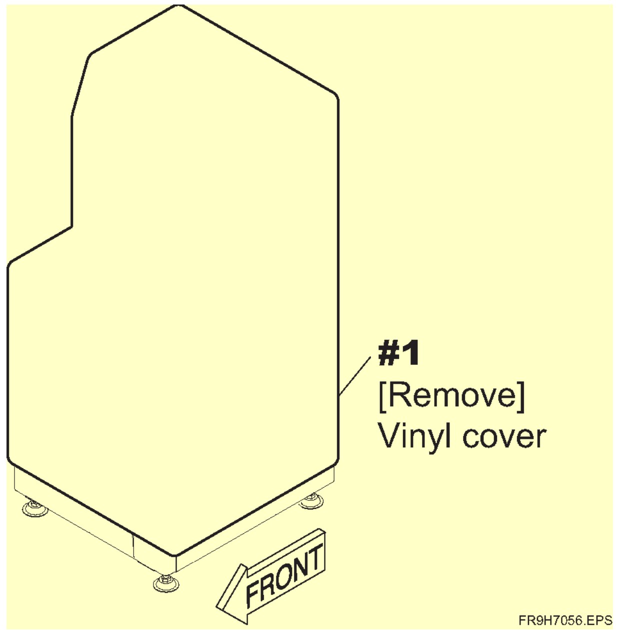
13. Cut the Insulock ties.


FRONT
#1 [Cut]
Insulock tie x2
Carrier pallet
Top plate
FR9H7052.EPS

14. Raise the adjustable feet up to their upper limit.


FRONT
#1 [Secure]
Na16 (x4)
Adjustable foot
FR9H7017.EPS

15. Remove the vinyl cover that protects the machine.


#1
[Remove]
Vinyl cover
FRONT
FR9H7056.EPS

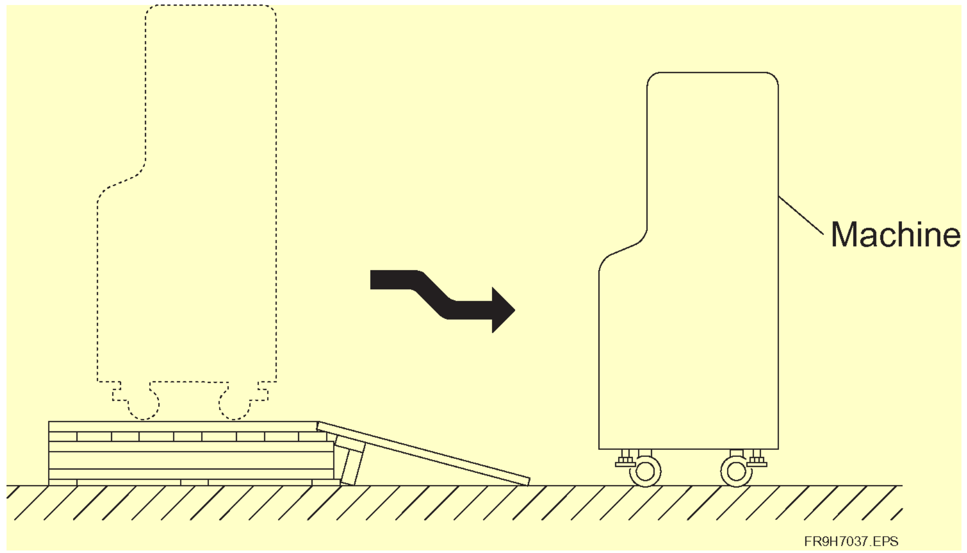
◆ INSTRUCTION ◆

During the winter season, allow the machine to stand under its cover-attached condition for sufficient time before unpacking it.
If the vinyl cover is removed immediately after the machine is carried into the room, moisture condensation may occur on the machine.

16. Lower the machine from the carrier pallet.

⚠ CAUTION

When lowering the machine from the carrier pallet, one person should be positioned on the right-hand side of the machine, and the other on its left-hand side.

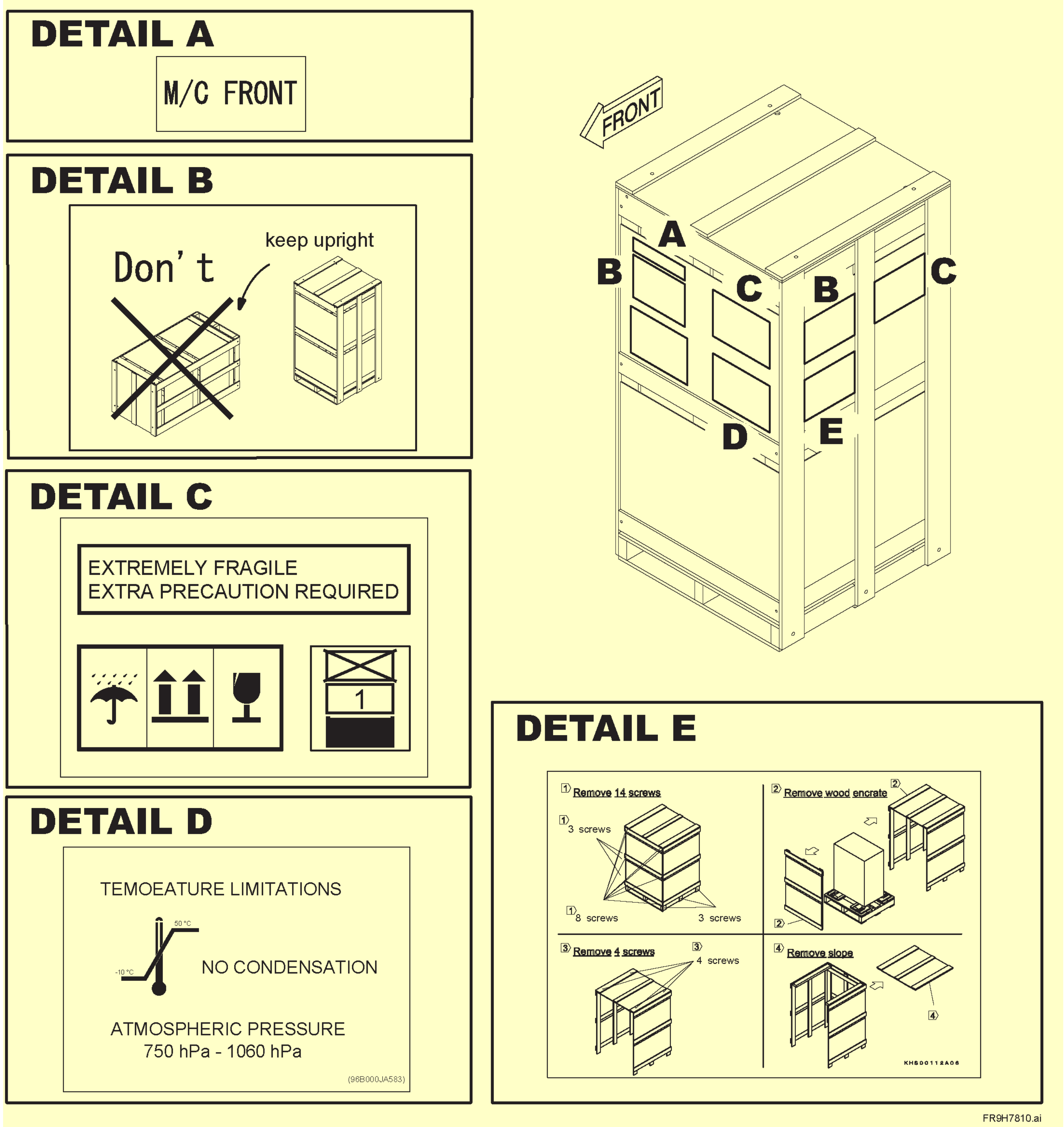

Machine
FR9H7037.EPS

3.2.2 Unloading (#50001 or Later): For countries specifying the crate

1. **Move down the machine together with the carrier pallet from the load-carrying platform of the truck.**

◇ *REFERENCE* ◇

- The following label is attached to the crate.
- In case of machines for China, a label in Chinese is attached.

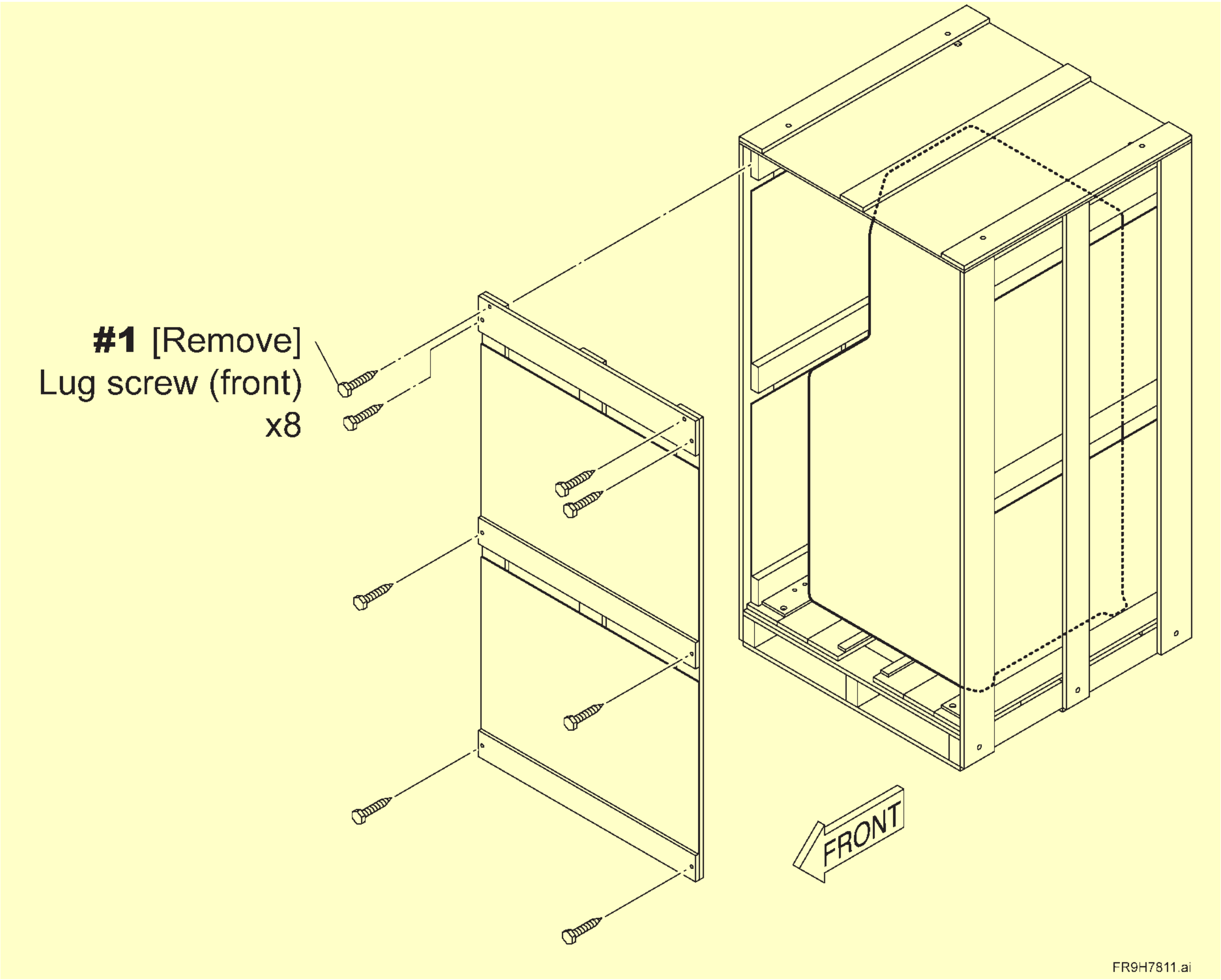

DETAIL A
M/C FRONT
DETAIL B
Don't
keep upright
DETAIL C
EXTREMELY FRAGILE
EXTRA PRECAUTION REQUIRED
1
DETAIL D
TEMOEATURE LIMITATIONS
50 °C
-10 °C
NO CONDENSATION
ATMOSPHERIC PRESSURE
750 hPa - 1060 hPa
(96B000JA583)
FRONT
A
B
C
B
C
D
E
DETAIL E
① Remove 14 screws
① 3 screws
① 8 screws
3 screws
② Remove wood encrate
②
②
③ Remove 4 screws
③ 4 screws
④ Remove slope
④
KHS00112A06

FR9H7810.ai

2. **Remove the front end of the crate.**

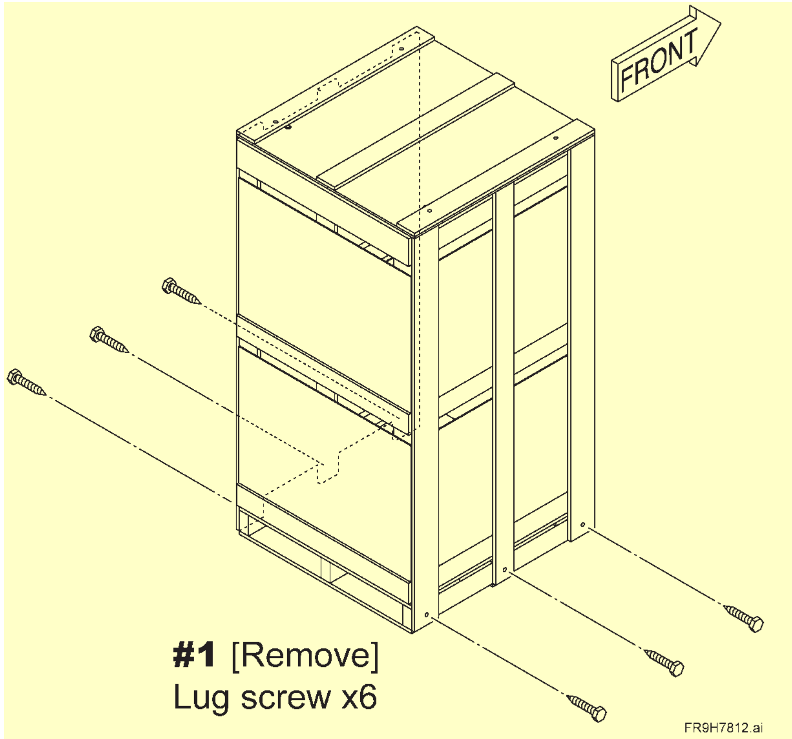
◆ ***NOTE*** ◆

The removed crate should be moved away to an unobstructive place.


#1 [Remove]
Lug screw (front)
x8
FRONT

FR9H7811.ai

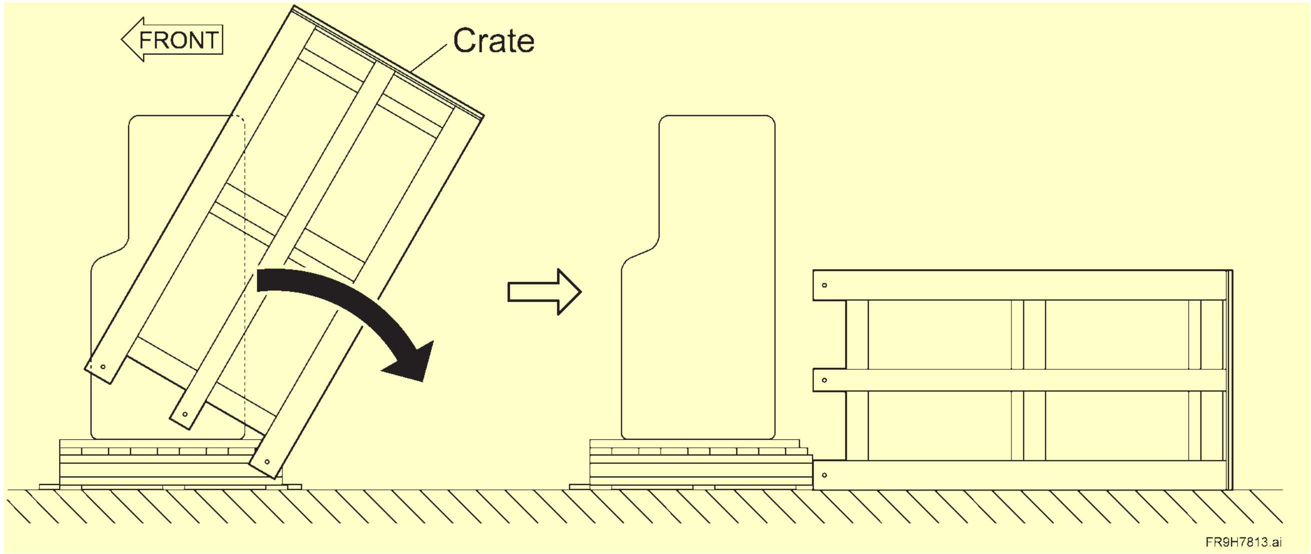
3. Remove the screws from the crate.


FRONT
#1 [Remove]
Lug screw x6
FR9H7812.ai

4. Incline the crate to take it out.

⚠ **CAUTION**

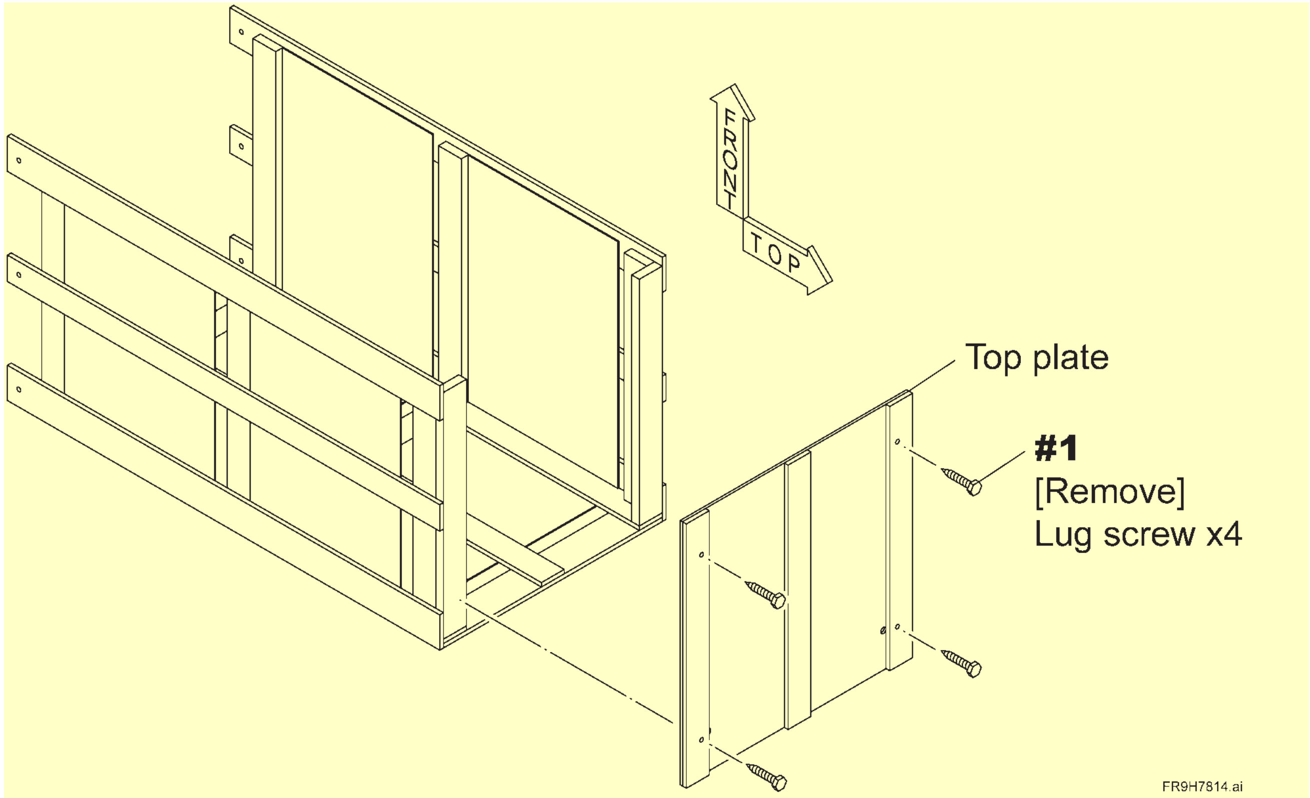
When removing the crate, incline the crate to take it out. If you try to move the crate, it might hit the machine, thereby damaging the machine.


FRONT
Crate
FR9H7813.ai

5. Remove the top plate from the crate.

⚠ **CAUTION**

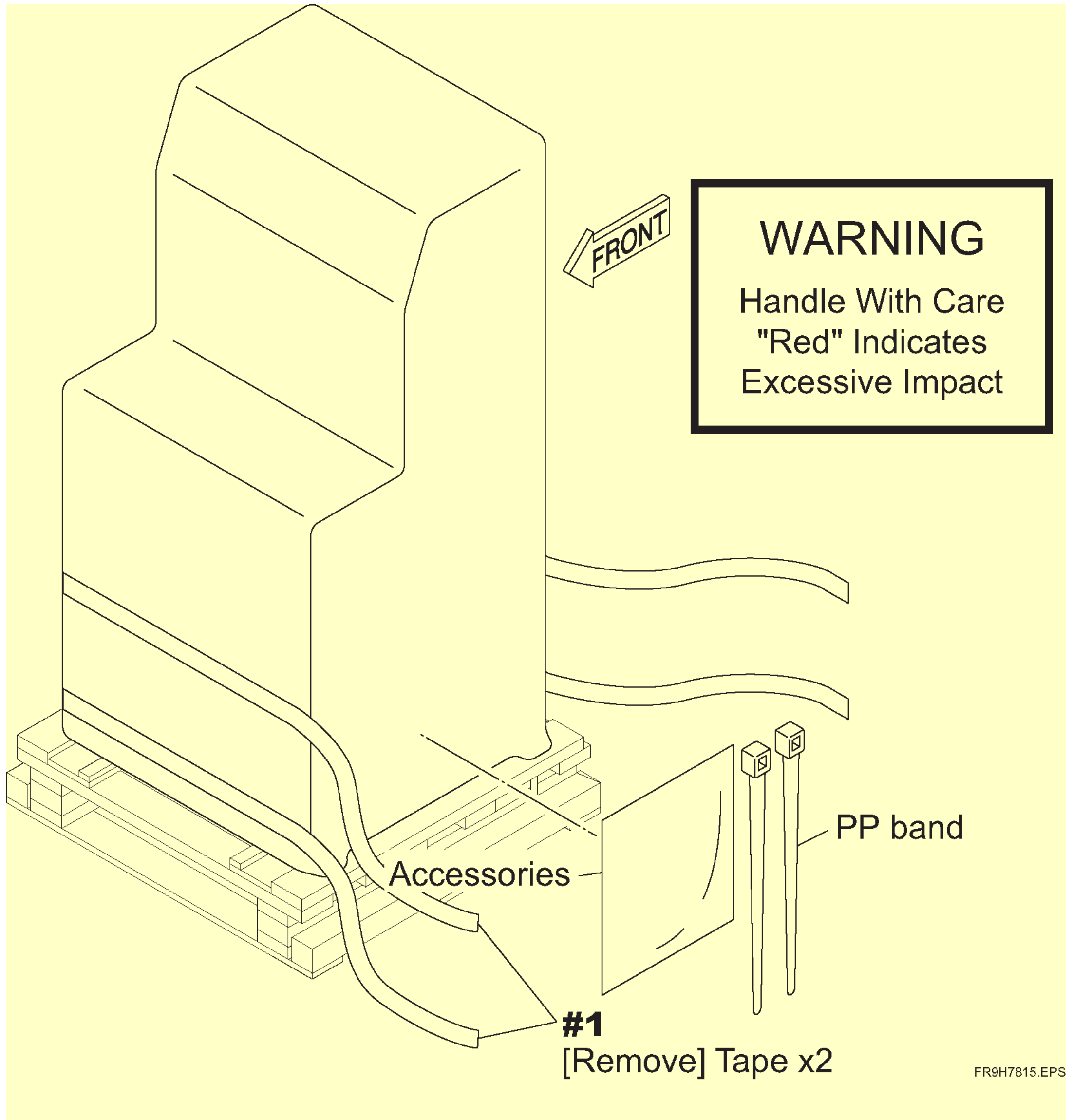
The top plate should not be disassembled, because it will be used when lowering the machine from the carrier pallet.


FRONT
TOP
Top plate
#1
[Remove]
Lug screw x4
FR9H7814.ai

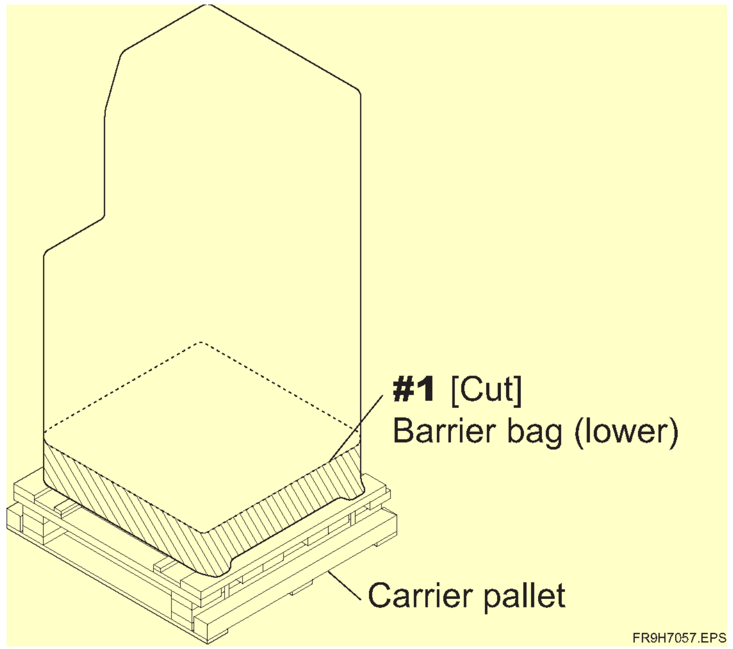
◇ REFERENCES ◇

- *After the top plate is removed, break up the crate and put the resulting pieces together for conveyance.*
- *Because the crate is assembled with nails, hit it with a hammer or the like from inside to break up the crate.*
- *Use care not to get injured by protruding nails when breaking up the crate.*

6. Remove the accessories-containing bug.


FRONT
WARNING
Handle With Care
"Red" Indicates
Excessive Impact
PP band
Accessories
#1
[Remove] Tape x2
FR9H7815.EPS

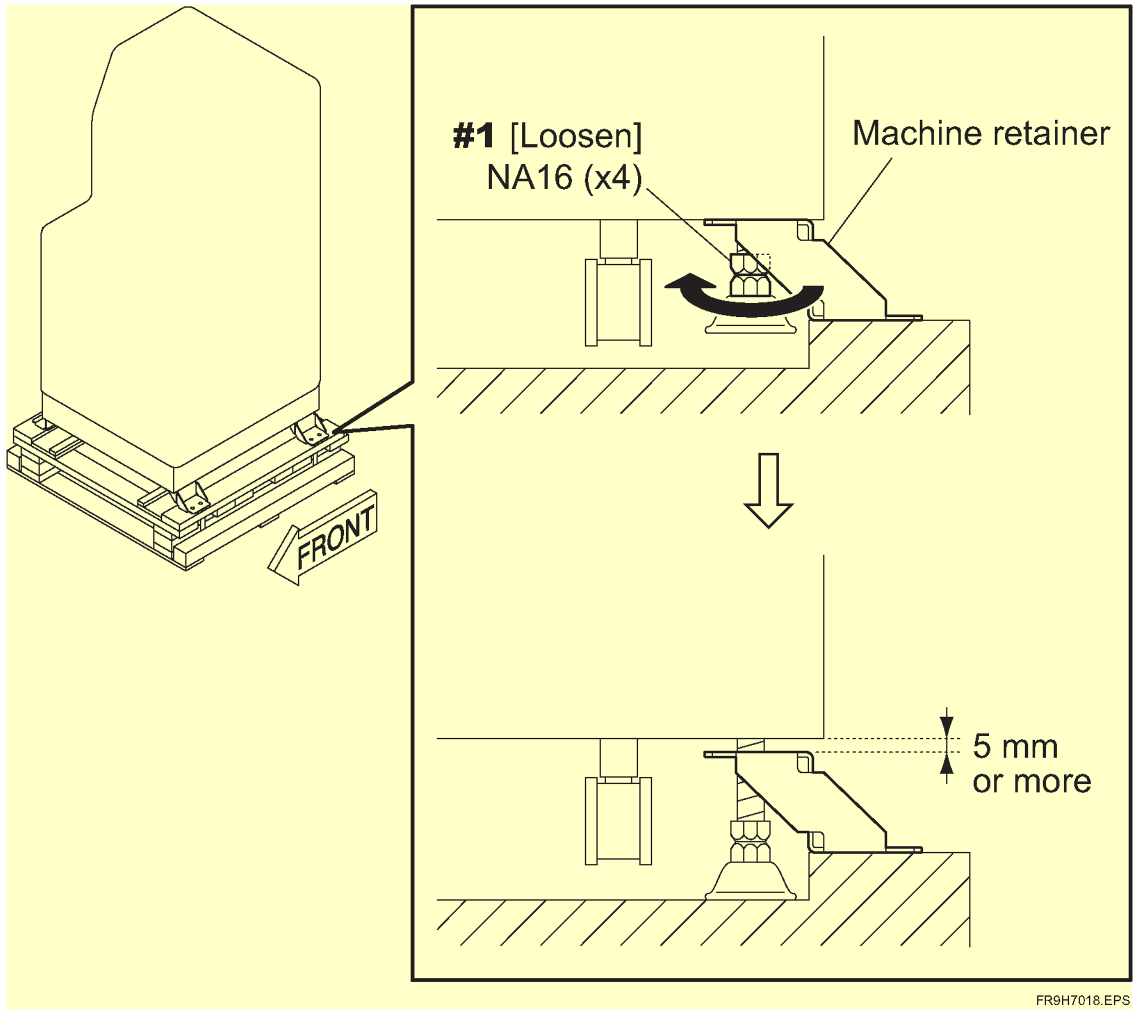
7. Remove the lower portion of the barrier bag that protects the machine.


#1 [Cut]
Barrier bag (lower)
Carrier pallet
FR9H7057.EPS

8. Lower the adjustable feet bolts to lift up the machine.

⚠ **CAUTION**

Unless the machine is lifted up by the adjustable feet, the machine retainers could not be removed.

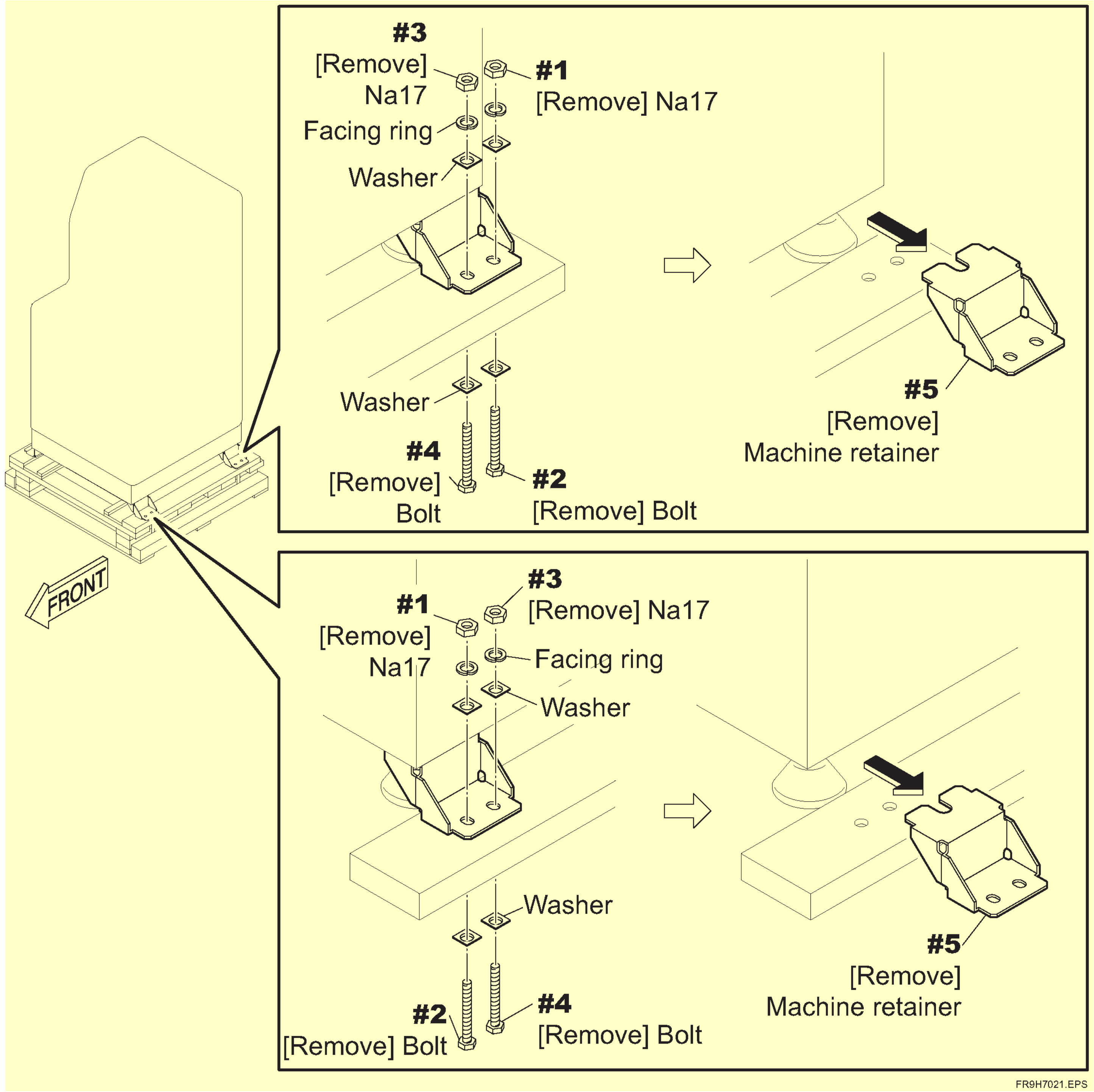

#1 [Loosen]
NA16 (x4)
Machine retainer
FRONT
5 mm
or more
FR9H7018.EPS

9. Remove the machine retainers on the right-hand side.

When the four nuts are loosened, the machine retainers lower accordingly, so that the machine moves down onto the carrier pallet.

⚠ **CAUTION**

When the nut is loosened, the machine may incline by its own weight. So, use care not to get your finger pinched by the machine retainer or adjustable foot.

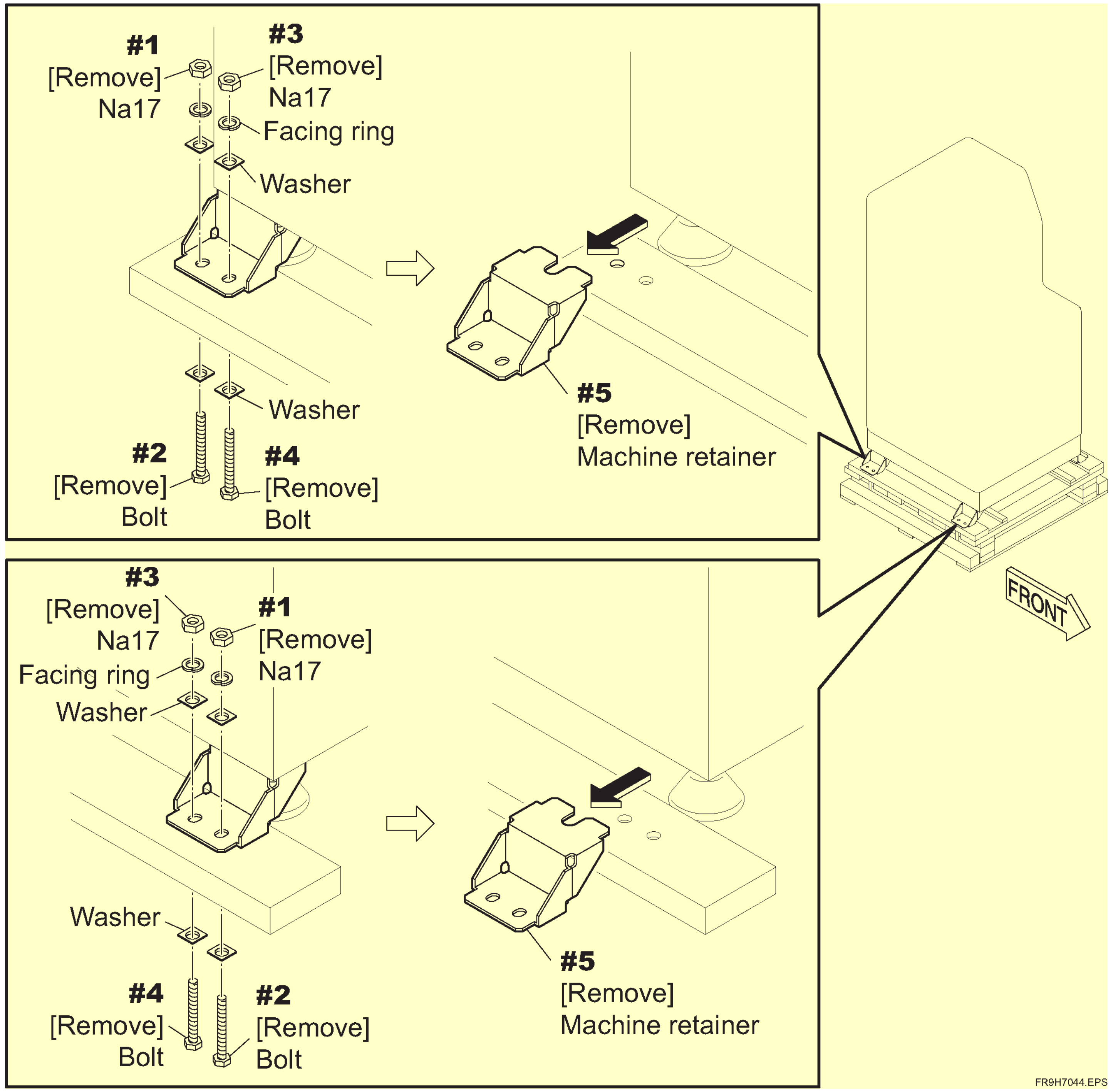

#3
[Remove]
Na17
#1
[Remove] Na17
Facing ring
Washer
Washer
#4
[Remove]
Bolt
#2
[Remove] Bolt
#5
[Remove]
Machine retainer
FRONT
#3
[Remove] Na17
#1
[Remove]
Na17
Facing ring
Washer
Washer
#2
[Remove] Bolt
#4
[Remove] Bolt
#5
[Remove]
Machine retainer
FR9H7021.EPS

10. Remove the machine retainers on the left-hand side.

When the four nuts are loosened, the machine retainers lower accordingly, so that the machine moves down onto the carrier pallet.

⚠ **CAUTION**

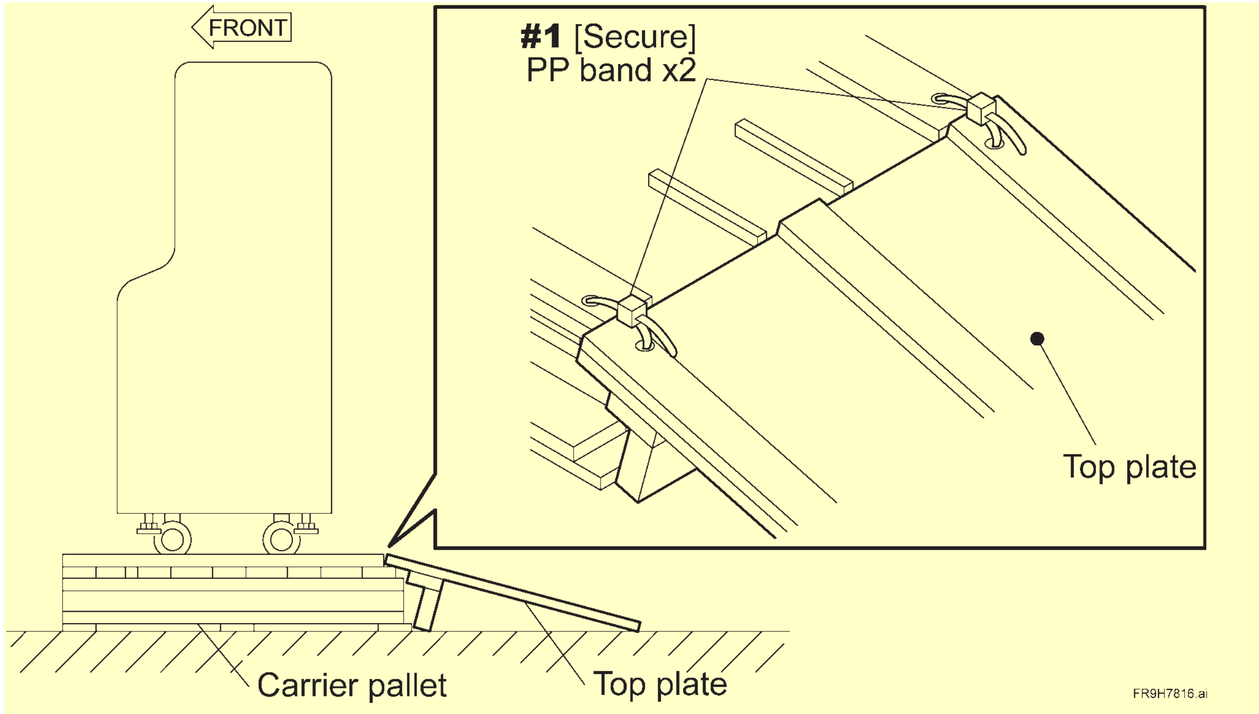
When the nut is loosened, the machine may incline by its own weight. So, use care not to get your finger pinched by the machine retainer or adjustable foot.


#1
[Remove]
Na17
#3
[Remove]
Na17
Facing ring
Washer
Washer
#2
[Remove]
Bolt
#4
[Remove]
Bolt
#5
[Remove]
Machine retainer
FRONT
#3
[Remove]
Na17
#1
[Remove]
Na17
Facing ring
Washer
Washer
#4
[Remove]
Bolt
#2
[Remove]
Bolt
#5
[Remove]
Machine retainer
FR9H7044.EPS

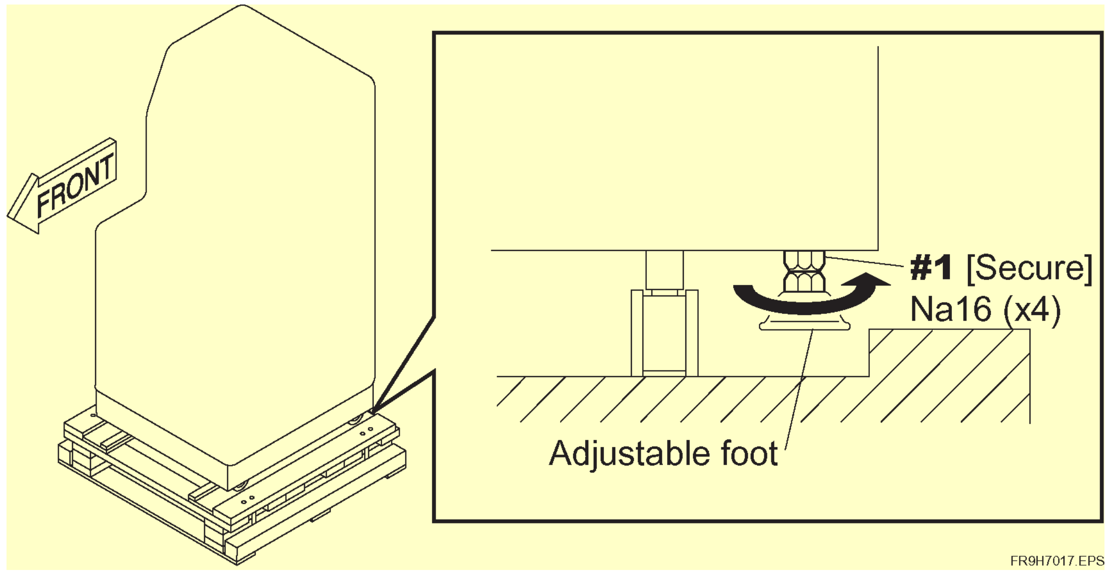
11. Secure the top plate removed at step 6 onto the carrier pallet.

CAUTIONS

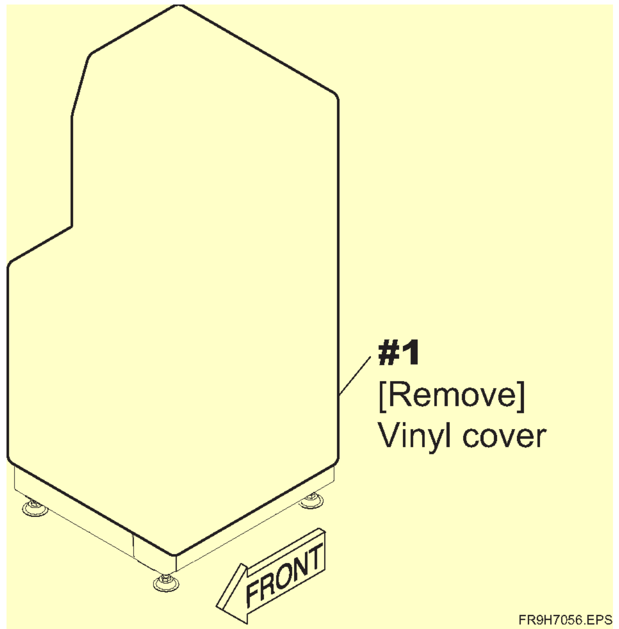
- ***Use the insulock ties to fix the top plate onto the carrier pallet securely.***
- ***Be sure to secure the top plate on the rear side of the machine. The carrier pallet is designed so that the top plate cannot be secured on the front side of the machine.***


FRONT
#1 [Secure]
PP band x2
Top plate
Carrier pallet
Top plate
FR9H7816.ai

12. Raise the adjustable feet up to their upper limit.


FRONT
#1 [Secure]
Na16 (x4)
Adjustable foot
FR9H7017.EPS

13. Remove the vinyl cover that protects the machine.


#1
[Remove]
Vinyl cover
FRONT
FR9H7056.EPS

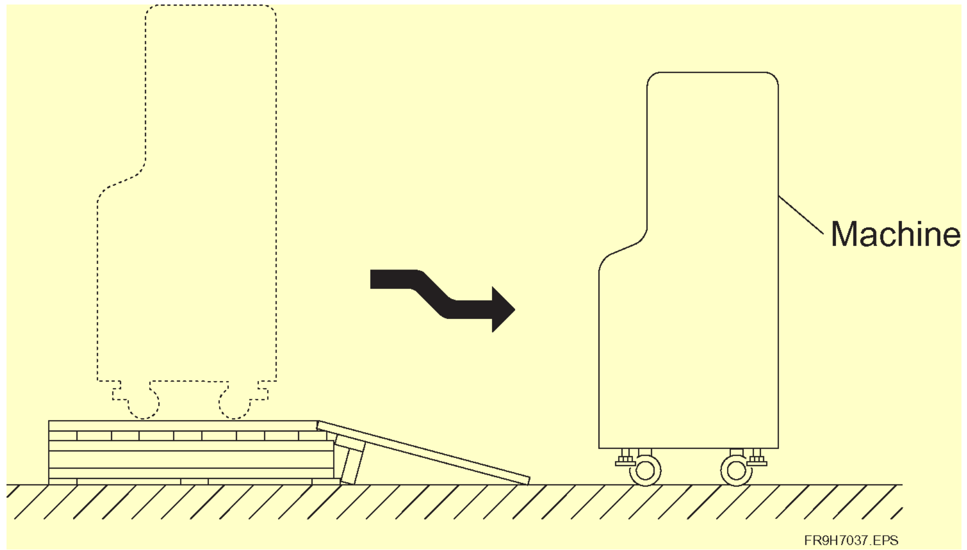
◆ ***INSTRUCTION*** ◆

During the winter season, allow the machine to stand under its cover-attached condition for sufficient time before unpacking it.
If the vinyl cover is removed immediately after the machine is carried into the room, moisture condensation may occur on the machine.

14. Lower the machine from the carrier pallet.

CAUTION

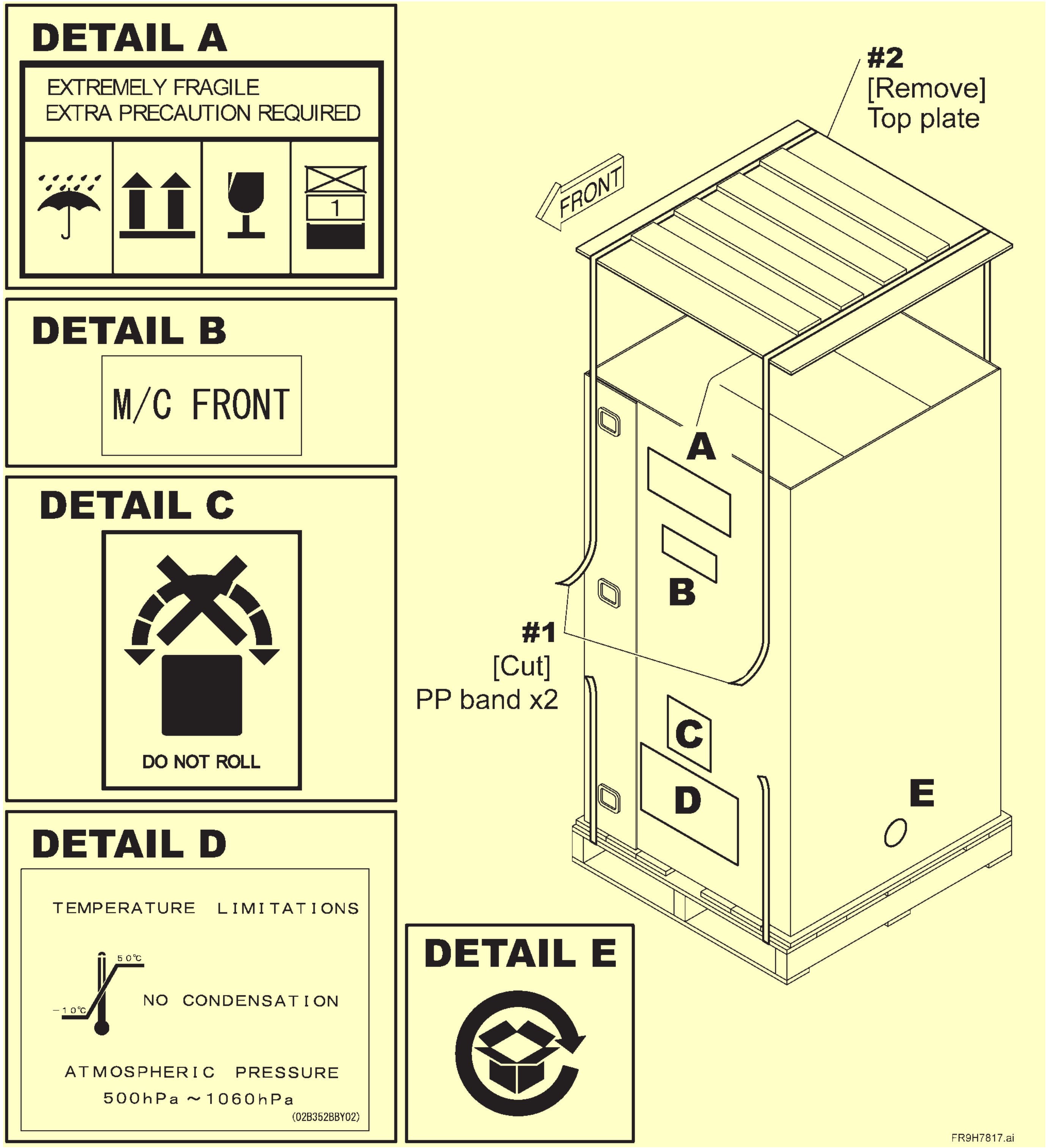
When lowering the machine from the carrier pallet, one person should be positioned on the right-hand side of the machine, and the other on its left-hand side.


Machine
FR9H7037.EPS

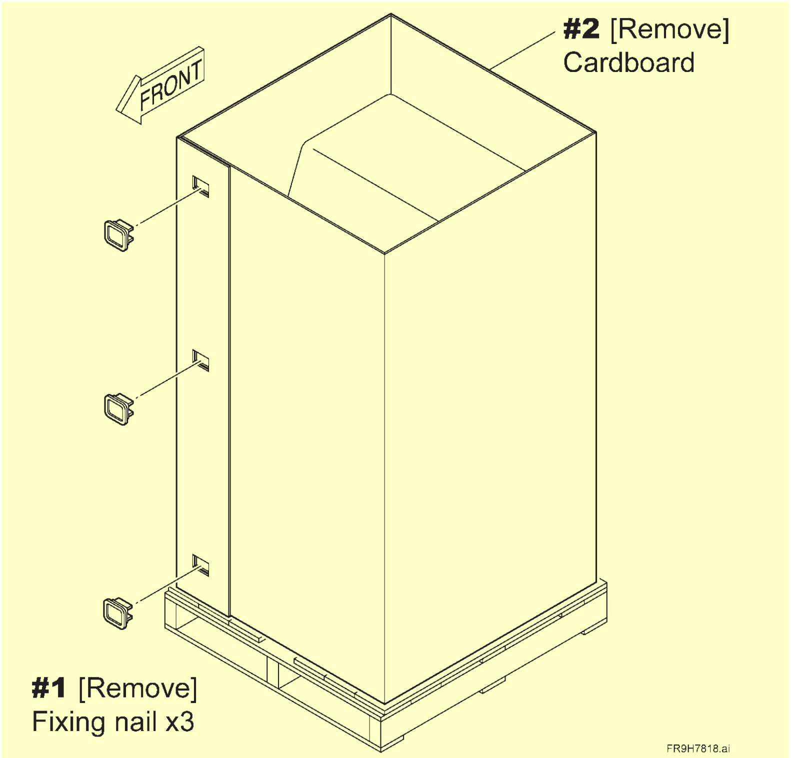
3.2.3 Unloading (#50001 or Later): Other than countries specifying the crate

1. Move down the machine together with the carrier pallet from the load-carrying platform of the truck.

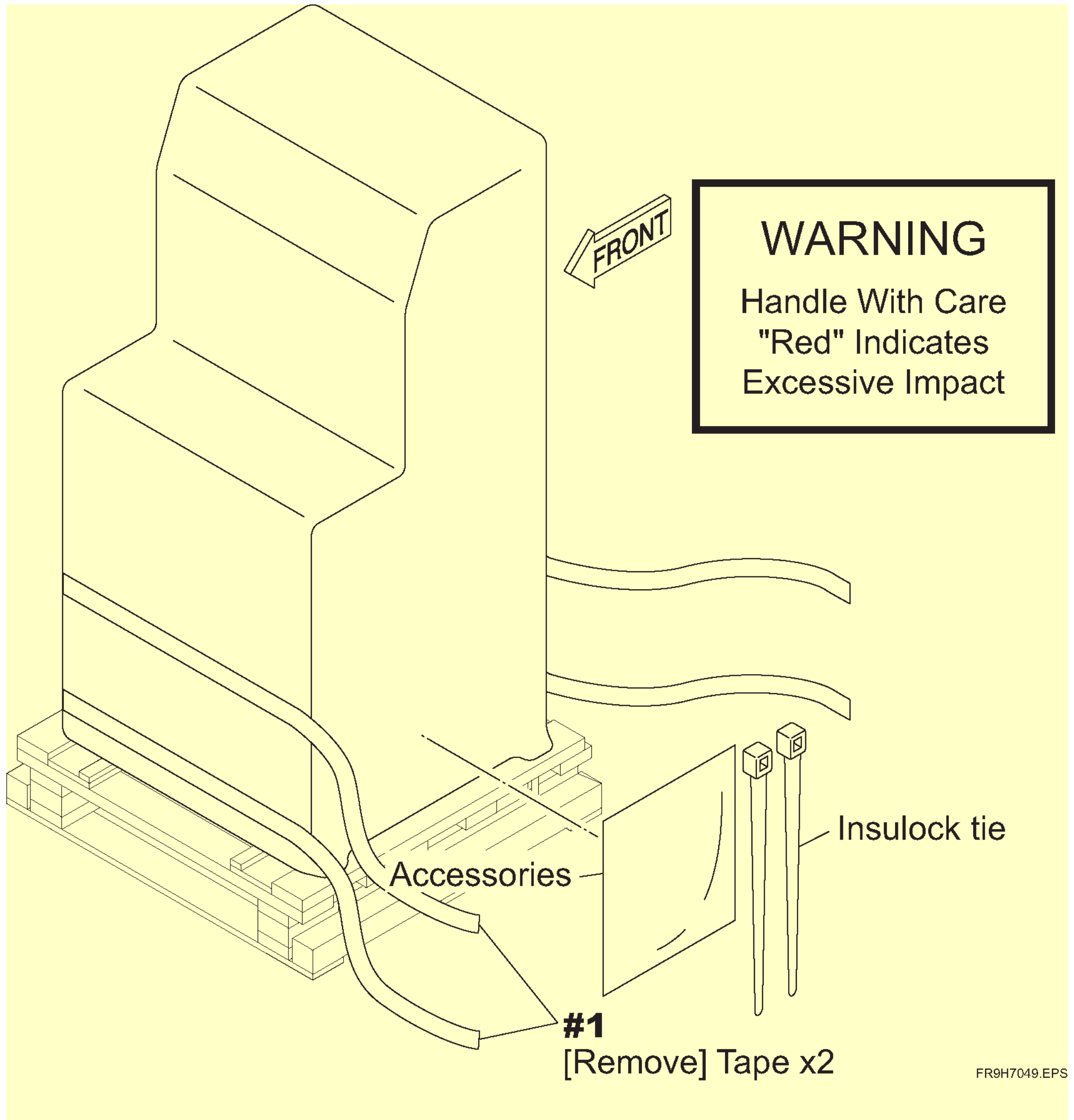
2. Cut the PP band, and remove the top plate.


DETAIL A
EXTREMELY FRAGILE
EXTRA PRECAUTION REQUIRED
1
DETAIL B
M/C FRONT
DETAIL C
DO NOT ROLL
DETAIL D
TEMPERATURE LIMITATIONS
50℃
−10℃
NO CONDENSATION
ATMOSPHERIC PRESSURE
500hPa ～1060hPa
(02B352BBY02)
DETAIL E
FRONT
#2 [Remove] Top plate
A
B
C
D
E
#1 [Cut] PP band x2
FR9H7817.ai

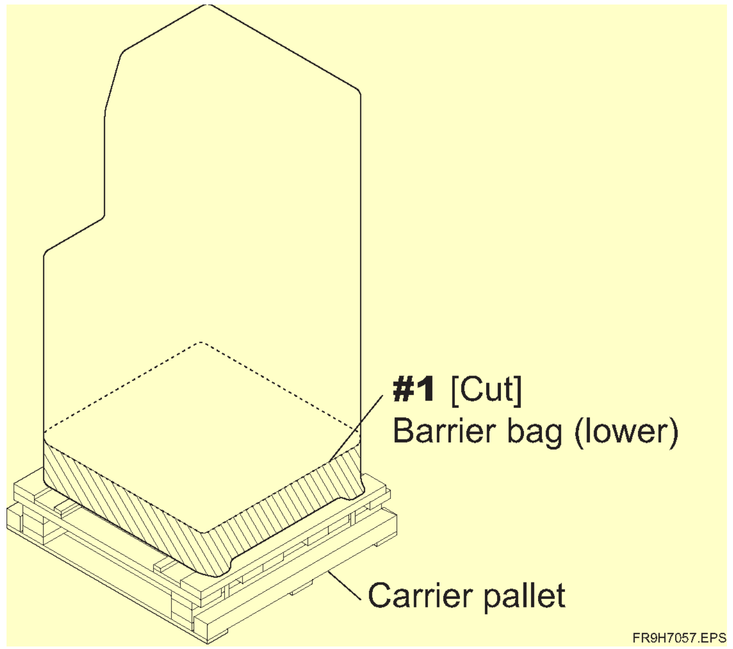
3. Clear the fixing nail, and remove the cardboard.


FRONT
#2 [Remove] Cardboard
#1 [Remove] Fixing nail x3
FR9H7818.ai

4. Remove the accessories-containing bug.


FRONT
WARNING
Handle With Care
"Red" Indicates
Excessive Impact
Insulock tie
Accessories
#1
[Remove] Tape x2
FR9H7049.EPS

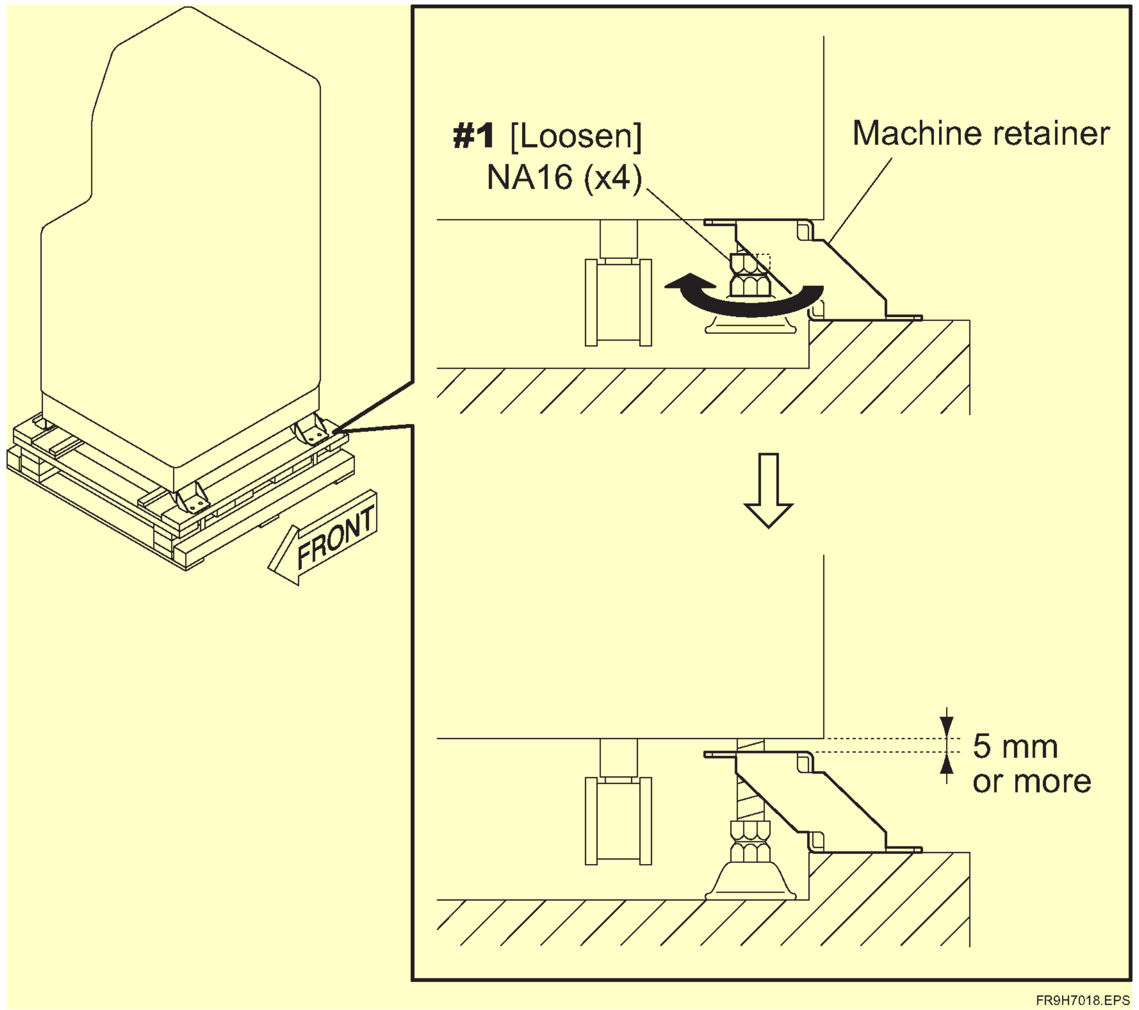
5. Remove the lower portion of the barrier bag that protects the machine.


#1 [Cut]
Barrier bag (lower)
Carrier pallet
FR9H7057.EPS

6. Lower the adjustable feet bolts to lift up the machine.

⚠ ***CAUTION***

Unless the machine is lifted up by the adjustable feet, the machine retainers could not be removed.

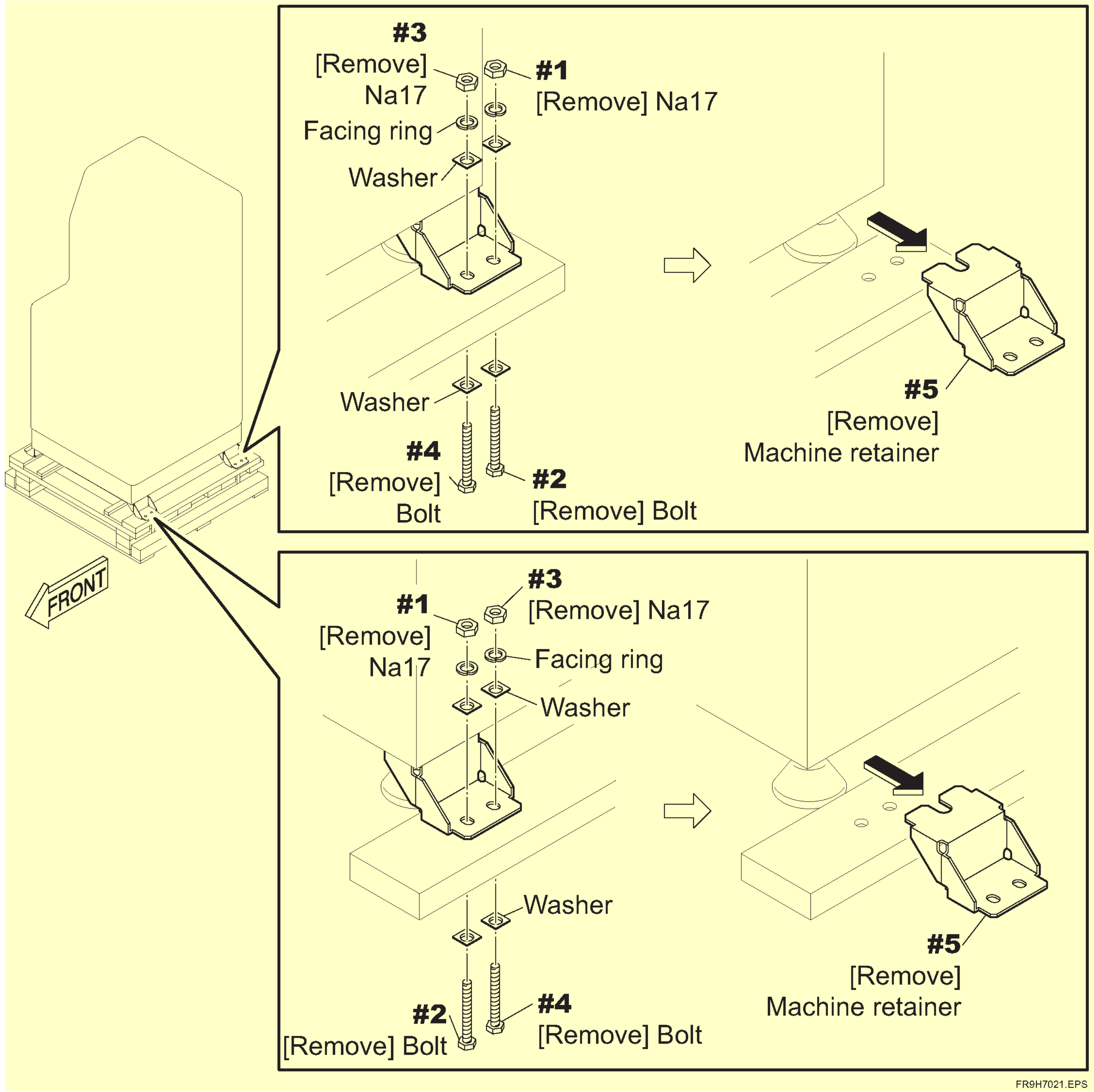

#1 [Loosen]
NA16 (x4)
Machine retainer
FRONT
5 mm
or more
FR9H7018.EPS

7. Remove the machine retainers on the right-hand side.

When the four nuts are loosened, the machine retainers lower accordingly, so that the machine moves down onto the carrier pallet.

⚠ ***CAUTION***

When the nut is loosened, the machine may incline by its own weight. So, use care not to get your finger pinched by the machine retainer or adjustable foot.

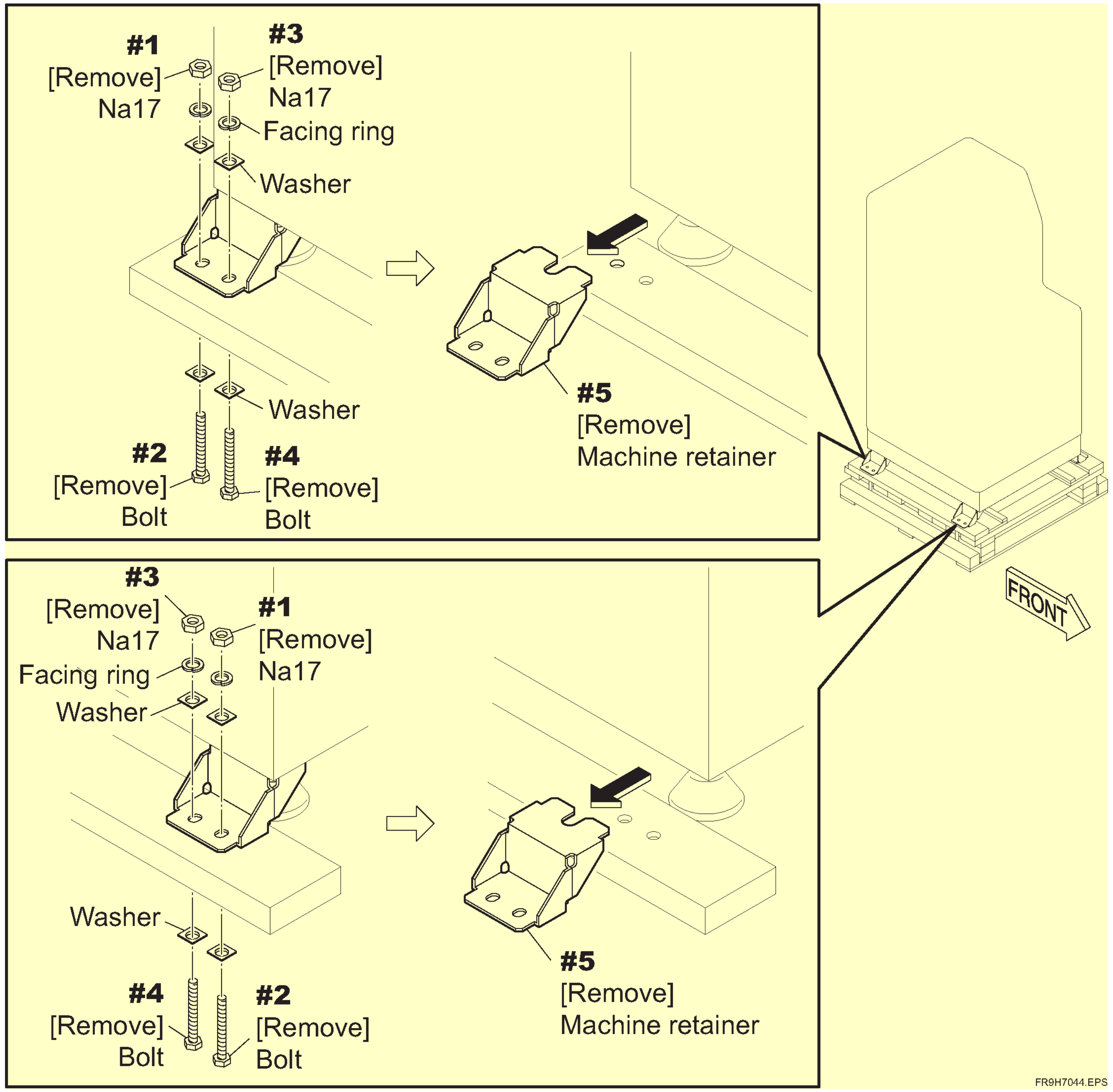

#3
[Remove]
Na17
#1
[Remove] Na17
Facing ring
Washer
Washer
#4
[Remove]
Bolt
#2
[Remove] Bolt
#5
[Remove]
Machine retainer
FRONT
#1
[Remove]
Na17
#3
[Remove] Na17
Facing ring
Washer
Washer
#2
[Remove] Bolt
#4
[Remove] Bolt
#5
[Remove]
Machine retainer
FR9H7021.EPS

8. Remove the machine retainers on the left-hand side.

When the four nuts are loosened, the machine retainers lower accordingly, so that the machine moves down onto the carrier pallet.

⚠ ***CAUTION***

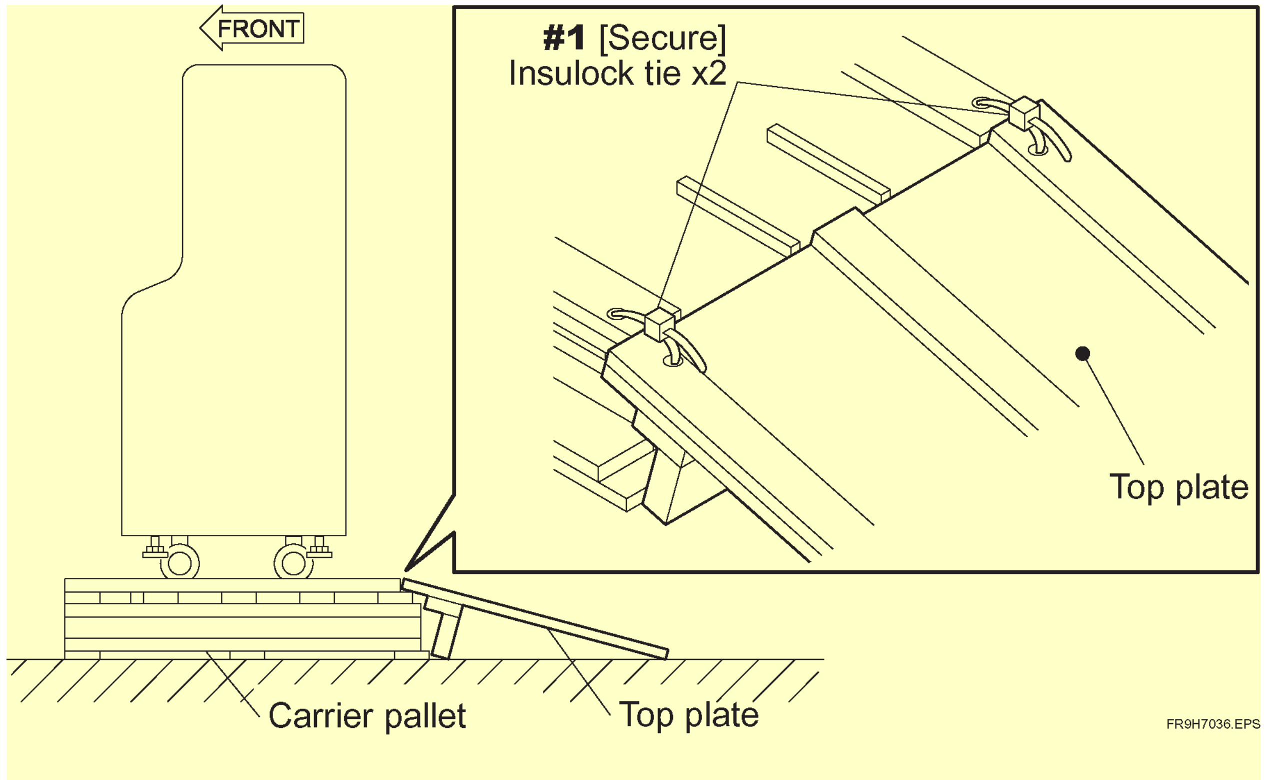
When the nut is loosened, the machine may incline by its own weight. So, use care not to get your finger pinched by the machine retainer or adjustable foot.


#1
[Remove]
Na17
#3
[Remove]
Na17
Facing ring
Washer
Washer
#2
[Remove]
Bolt
#4
[Remove]
Bolt
#5
[Remove]
Machine retainer
FRONT
#3
[Remove]
Na17
#1
[Remove]
Na17
Facing ring
Washer
Washer
#4
[Remove]
Bolt
#2
[Remove]
Bolt
#5
[Remove]
Machine retainer
FR9H7044.EPS

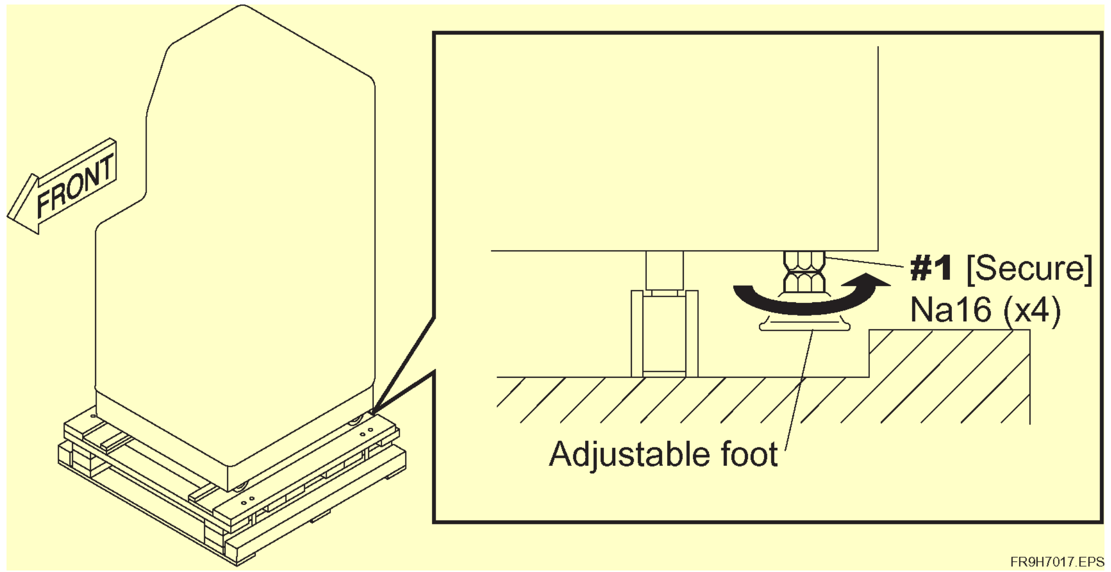
9. Secure the top plate removed at step 6 onto the carrier pallet.

⚠ ***CAUTIONS***

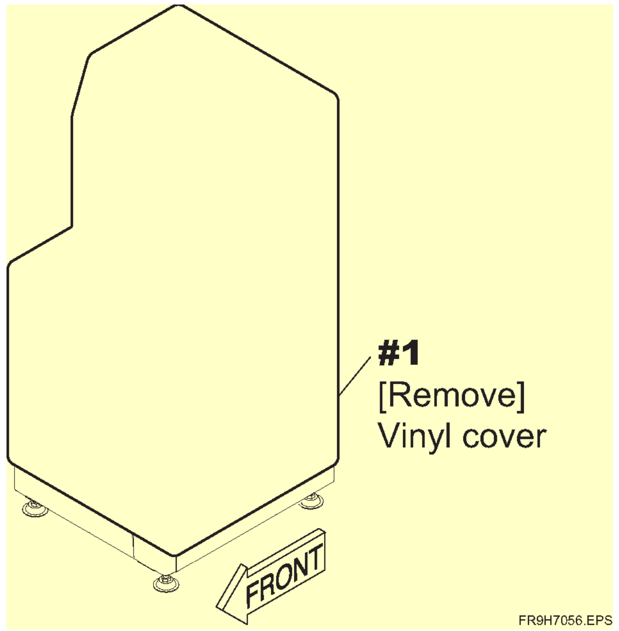
- ***Use the insulock ties to fix the top plate onto the carrier pallet securely.***
- ***Be sure to secure the top plate on the rear side of the machine. The carrier pallet is designed so that the top plate cannot be secured on the front side of the machine.***


FRONT
#1 [Secure]
Insulock tie x2
Top plate
Carrier pallet
Top plate
FR9H7036.EPS

10. Raise the adjustable feet up to their upper limit.


FRONT
#1 [Secure]
Na16 (x4)
Adjustable foot
FR9H7017.EPS

11. Remove the vinyl cover that protects the machine.


#1
[Remove]
Vinyl cover
FRONT
FR9H7056.EPS

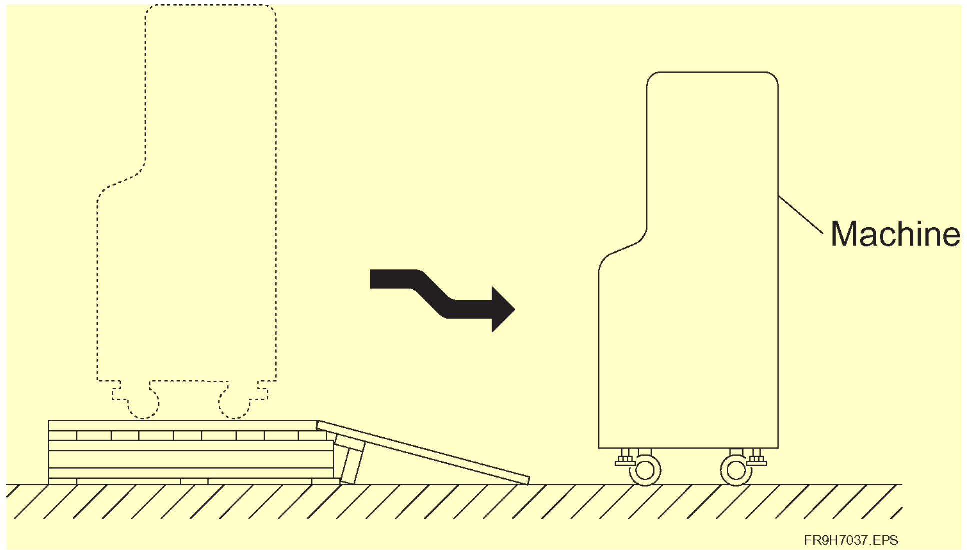
◆ ***INSTRUCTION*** ◆

During the winter season, allow the machine to stand under its cover-attached condition for sufficient time before unpacking it.
If the vinyl cover is removed immediately after the machine is carried into the room, moisture condensation may occur on the machine.

12. Lower the machine from the carrier pallet.

⚠ ***CAUTION***

When lowering the machine from the carrier pallet, one person should be positioned on the right-hand side of the machine, and the other on its left-hand side.


Machine
FR9H7037.EPS

3.3 Transfer

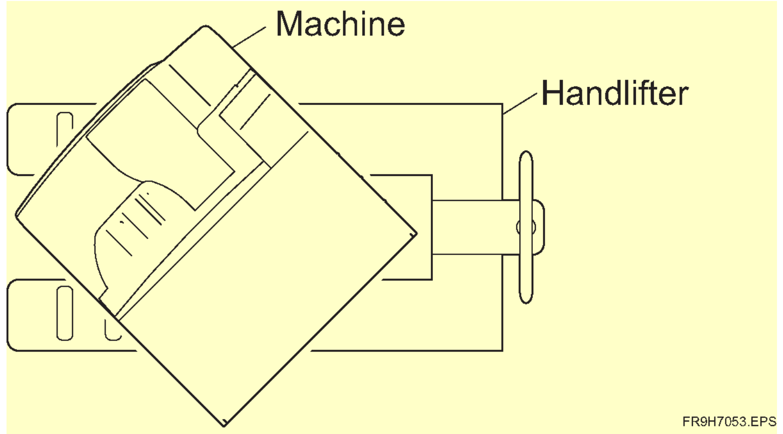
CAUTIONS

- *When unloading the machine, two persons should always cooperate to do so.*
- *When transferring the machine by use of its casters, raise the adjustable feet of the machine all the way up to their upper limit.*
- *When bringing the machine into the installation place, support it so that it will not topple down.*
- *When supporting the machine, grasp the sides and rear of the machine. If the plastic portion of the machine's front is grasped, the machine may be damaged.*
- *When the machine should be moved over some step or bump, move it as slowly as possible to avoid shock to it. Note that the step over which the machine may move is about 10 mm high at most.*

1. **Put the hand lifter underneath the machine.**

◆ ***INSTRUCTION*** ◆

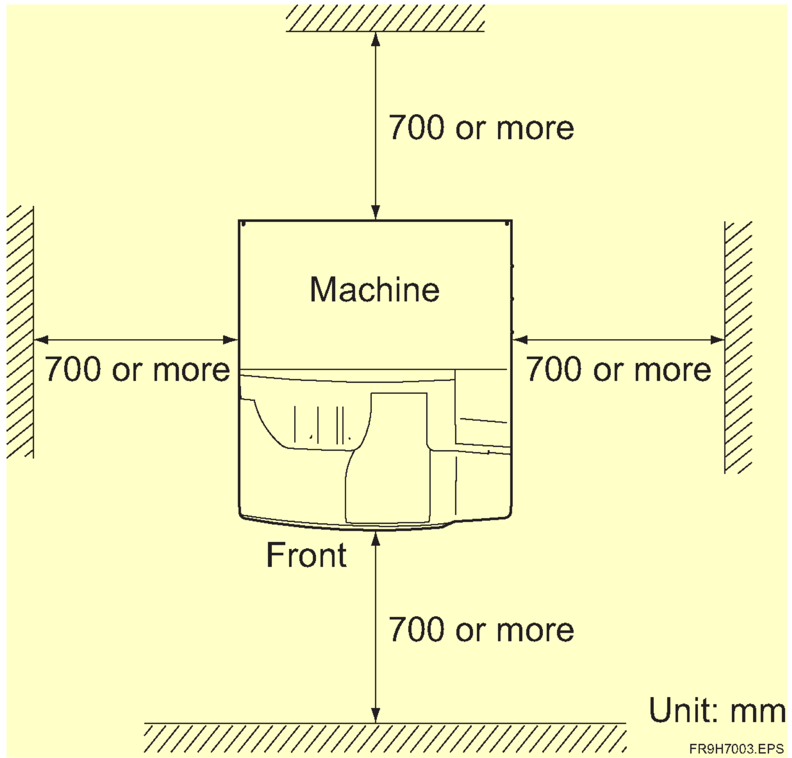
The hand lifter should be oriented aslant with respect to the machine.


Machine
Handlifter
FR9H7053.EPS

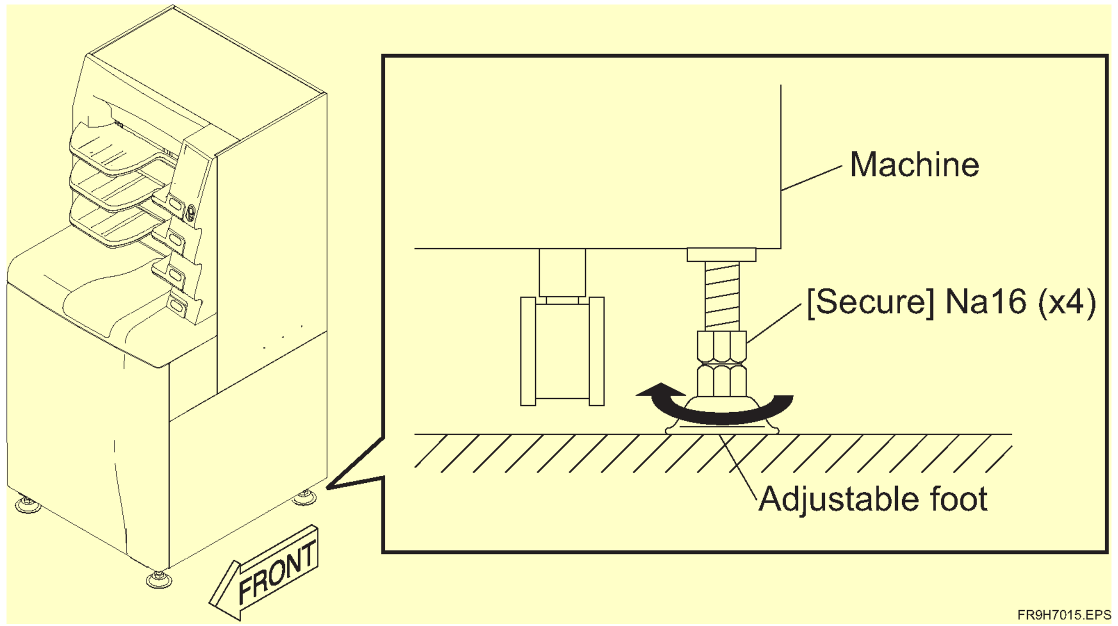
2. **Transfer the machine into the installation place.**

3.4 Temporary Placement

1. **Secure space required for installation procedures and temporarily place the machine.**


700 or more
Machine
700 or more
700 or more
Front
700 or more
Unit: mm
FR9H7003.EPS

2. **Secure the machine with the adjustable feet in place.**


Machine
[Secure] Na16 (x4)
Adjustable foot
FRONT
FR9H7015.EPS

3.5 Checking the Items Supplied

Check whether all the items are supplied in accordance with the PACKING LIST that is contained in each carton.

■ Machine Main Body

Check Item	Qty.	Remarks
Machine main body	1	

■ Accessories

Check Item	Qty.	Remarks
Instruction Manual	1	
Test Result Sheet	1	
Machine-specific data floppy diskette	1	3.5-inch/1.44 MB
CD-ROM	1	For backup
Fuse set	1	Spare
Clamp	2	
Insulock tie	2	
Label	1	Cassette insert operation label
	1	Exposure markers precaution label
Spur gear	1	
Timing belt wheel	1	324N3164
	1	324N3165
Screw	5	TP3x6
	2	T4x8

■ Optional Items

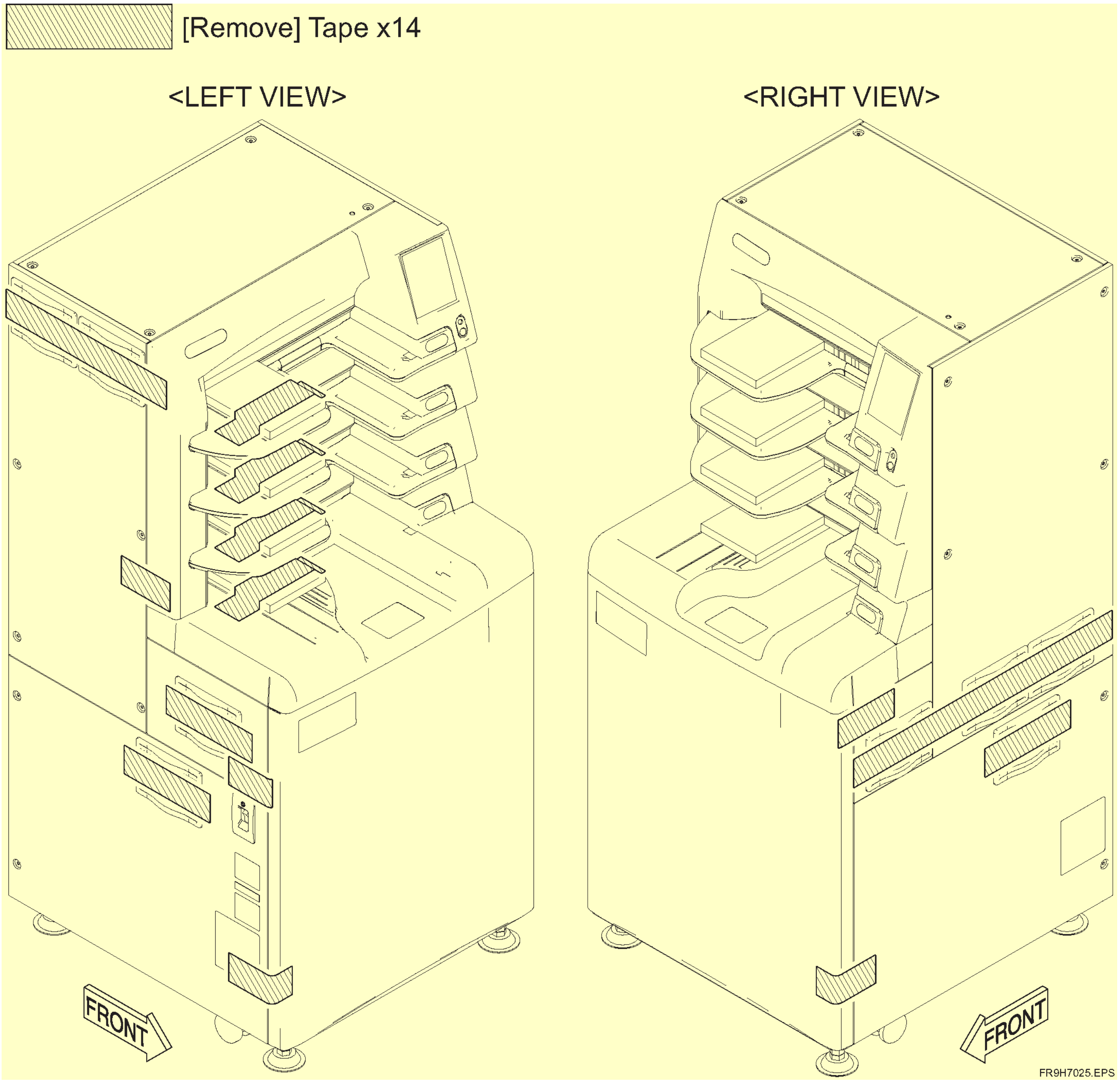
Check Item	Qty.	Remarks
Machine AC power cable for use in U.S.	1	
Machine AC power cable for use in Europe (excluding U.K.), TUV certified	1	
Machine AC power cable for use in U.K., TUV certified	1	
Anti-topple retainer kit	1	For retaining the machine
Both-side cassette identification barcode reader	1	

4. Installation Procedures

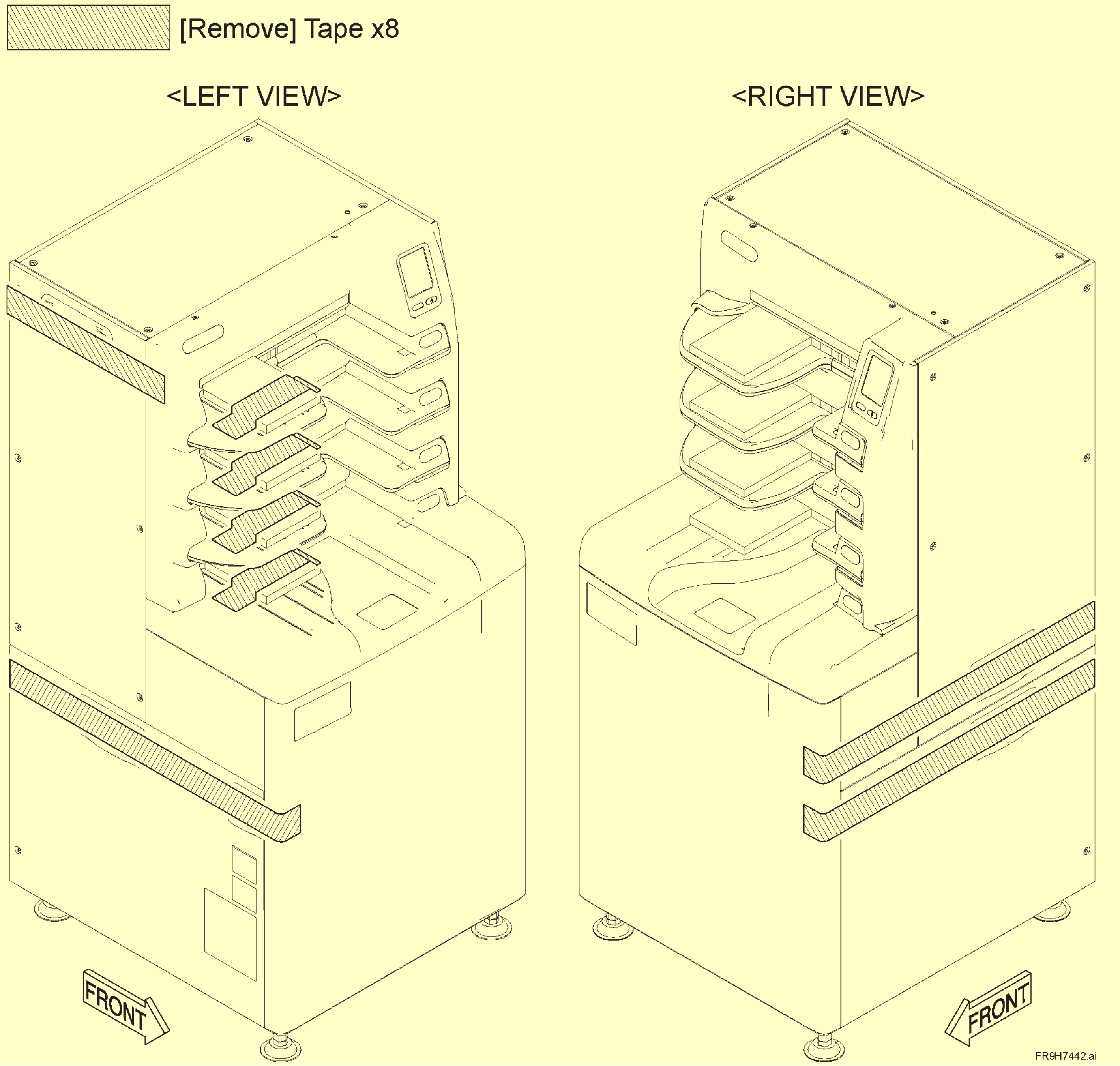
4.1 Removing Tapes from the Machine

1. Remove the tapes.

- #20001 or Later

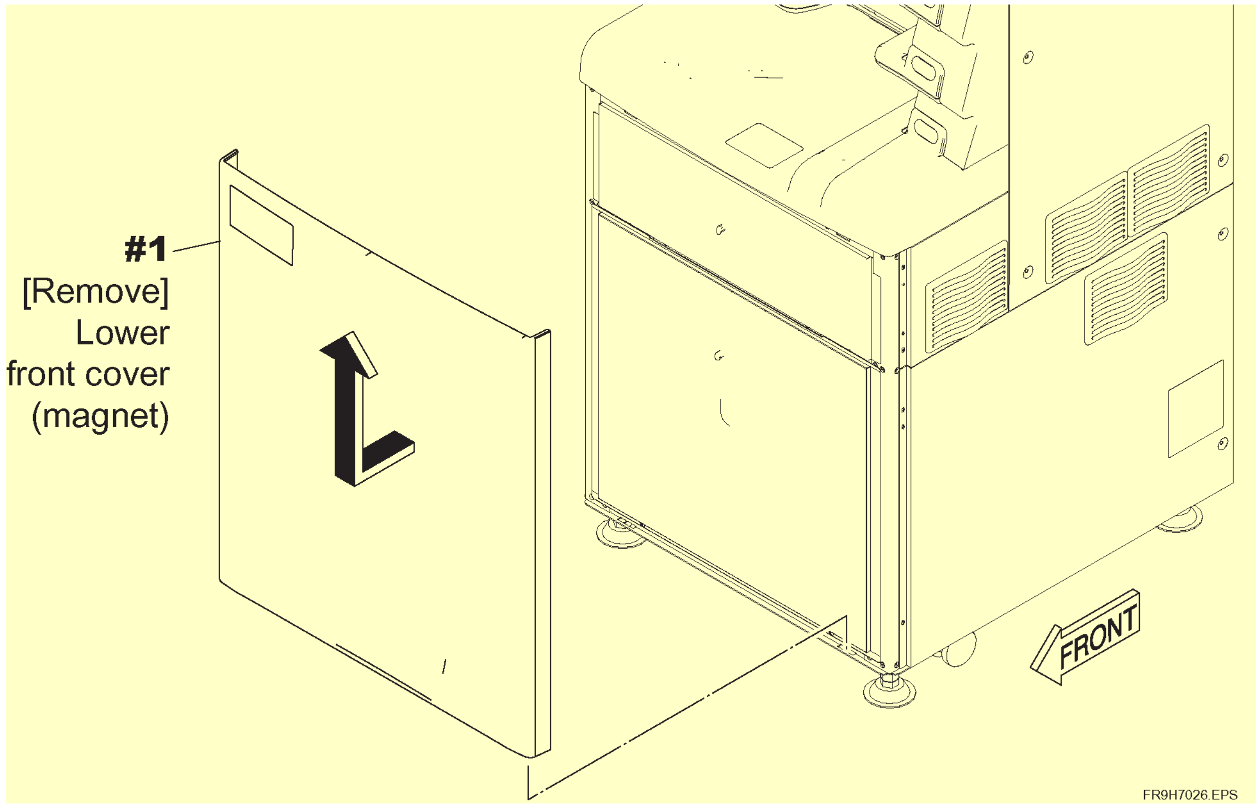

▨ [Remove] Tape x14
<LEFT VIEW>
<RIGHT VIEW>
FRONT
FRONT
FR9H7025.EPS

- #50001 or Later

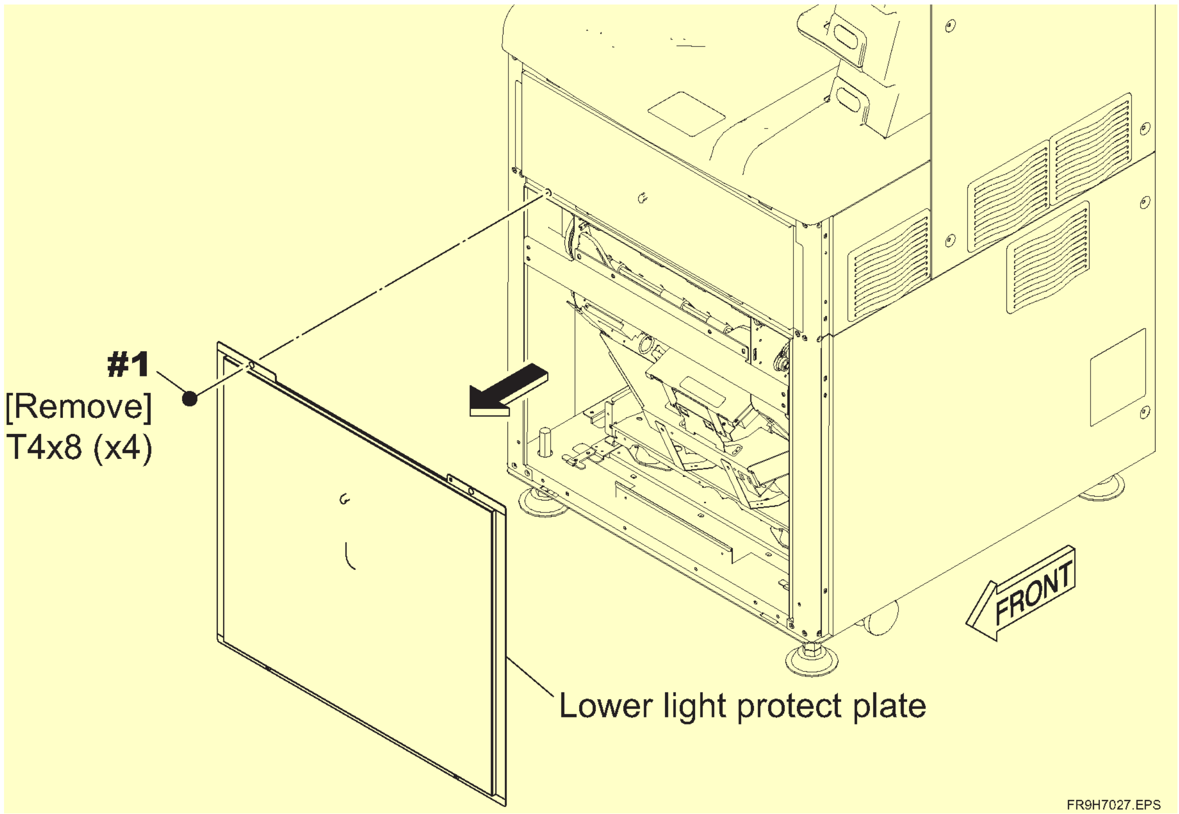

▨ [Remove] Tape x8
<LEFT VIEW>
<RIGHT VIEW>
FRONT
FRONT
FR9H7442.ai

4.2 Removing the Light Protect Plates

1. **Remove the lower front cover.**


#1
[Remove]
Lower
front cover
(magnet)
FRONT
FR9H7026.EPS

2. **Remove the lower light protect plate.**

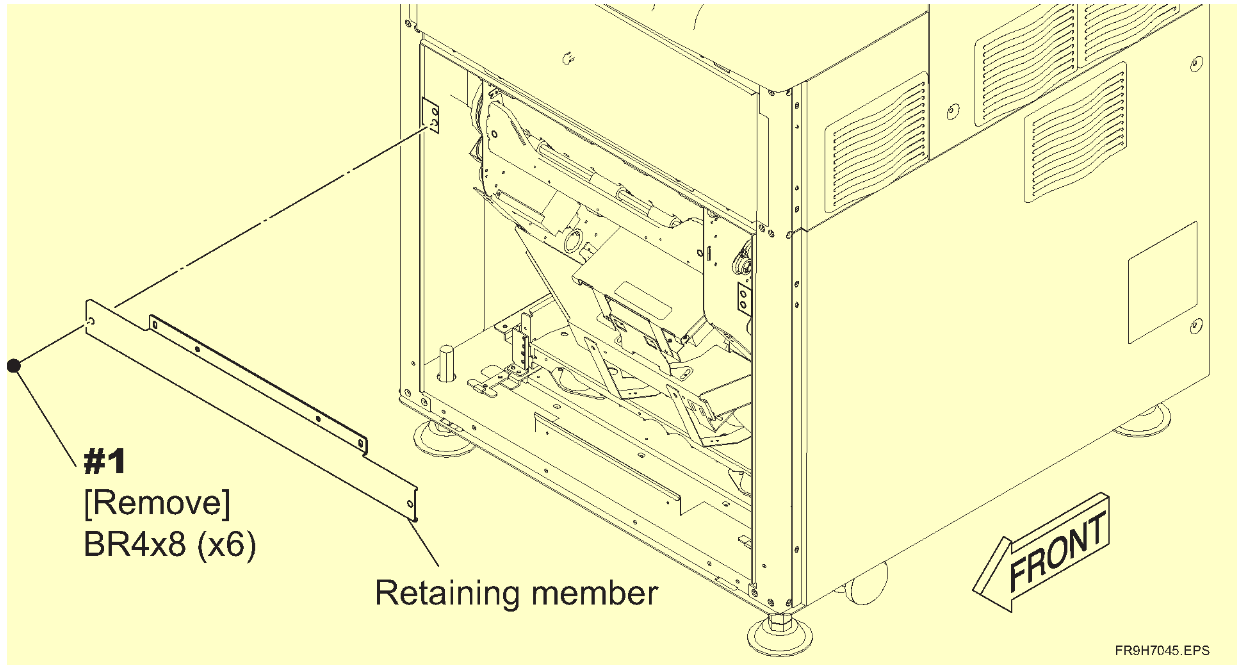

#1
[Remove]
T4x8 (x4)
Lower light protect plate
FRONT
FR9H7027.EPS

4.3 Repositioning the Retaining Members

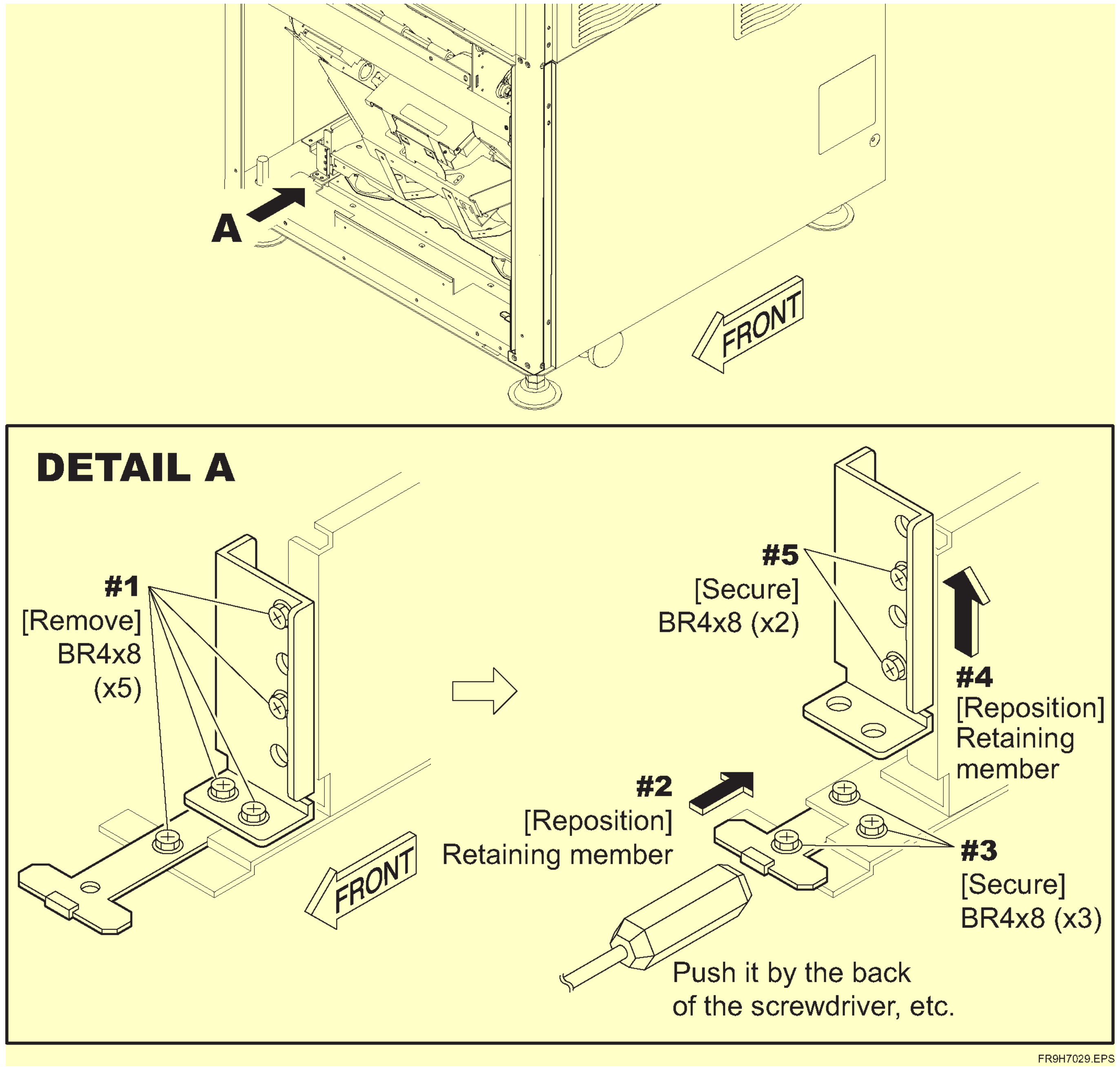
◇ *REFERENCE* ◇

The retaining members may be removed along the rope.

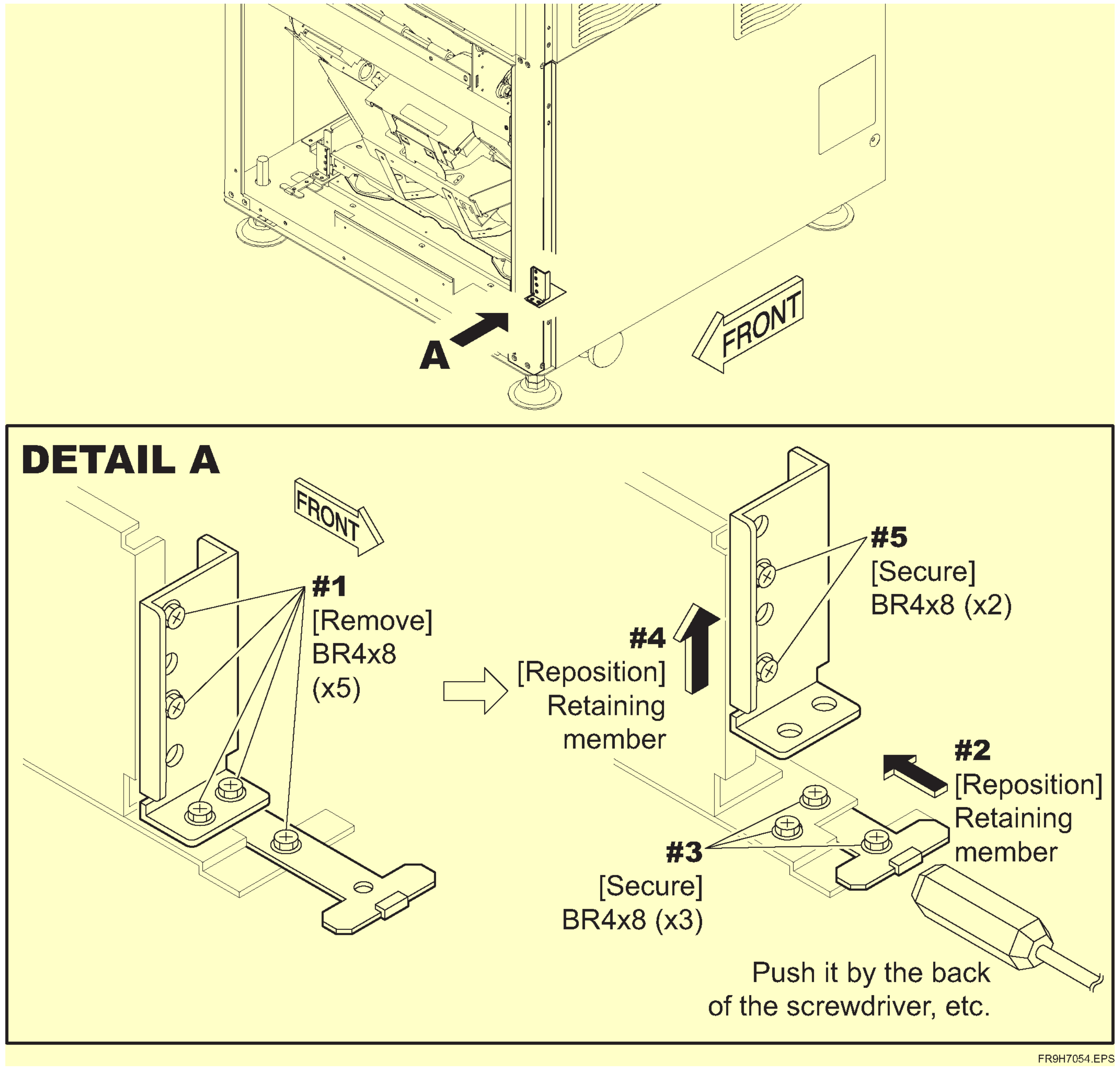
1. **Remove the upper retaining member.**


#1
[Remove]
BR4x8 (x6)
Retaining member
FRONT
FR9H7045.EPS

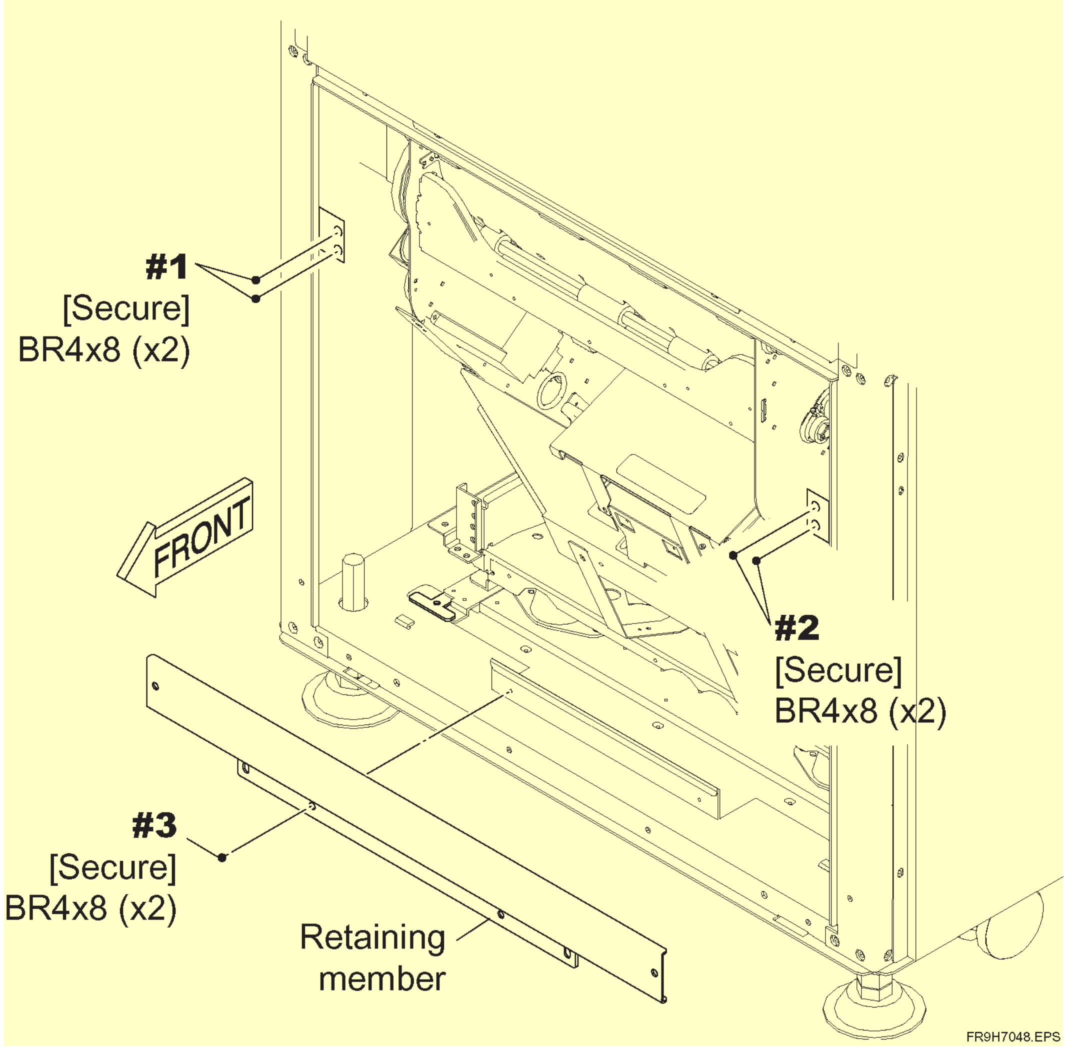
2. **Reposition the lower retaining members.**


A
FRONT
DETAIL A
#1
[Remove]
BR4x8
(x5)
FRONT
#5
[Secure]
BR4x8 (x2)
#4
[Reposition]
Retaining
member
#2
[Reposition]
Retaining member
#3
[Secure]
BR4x8 (x3)
Push it by the back
of the screwdriver, etc.
FR9H7029.EPS

3. **Reposition the lower retaining members.**


A
FRONT
DETAIL A
FRONT
#1
[Remove]
BR4x8
(x5)
#4
[Reposition]
Retaining
member
#5
[Secure]
BR4x8 (x2)
#2
[Reposition]
Retaining
member
#3
[Secure]
BR4x8 (x3)
Push it by the back
of the screwdriver, etc.
FR9H7054.EPS

4. **Attach the screws and upper retaining member.**


#1
[Secure]
BR4x8 (x2)
FRONT
#2
[Secure]
BR4x8 (x2)
#3
[Secure]
BR4x8 (x2)
Retaining member
FR9H7048.EPS

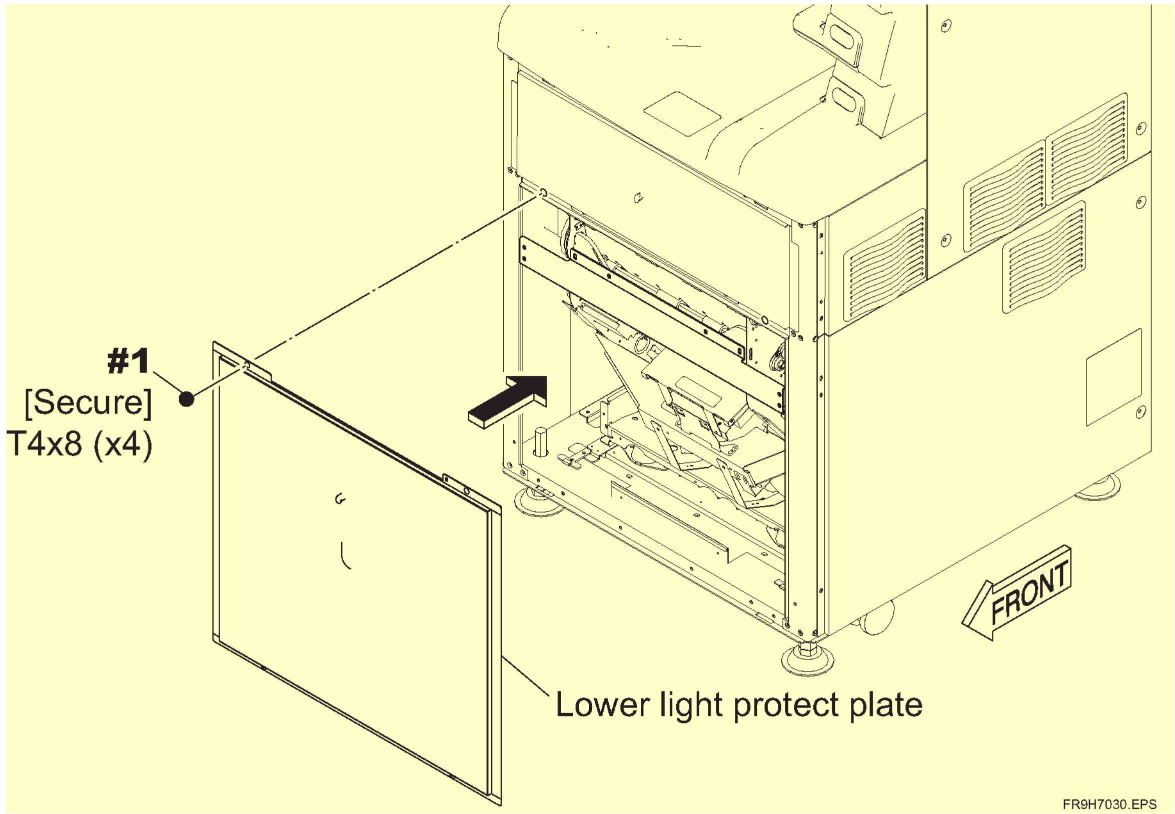
◆ ***INSTRUCTION*** ◆

When the "both-side cassette identification barcode reader" is to be installed to prevent wrong insertion of a cassette, see "Appendix 4 Setting the Both-Side Cassette Identification Barcode Reader"

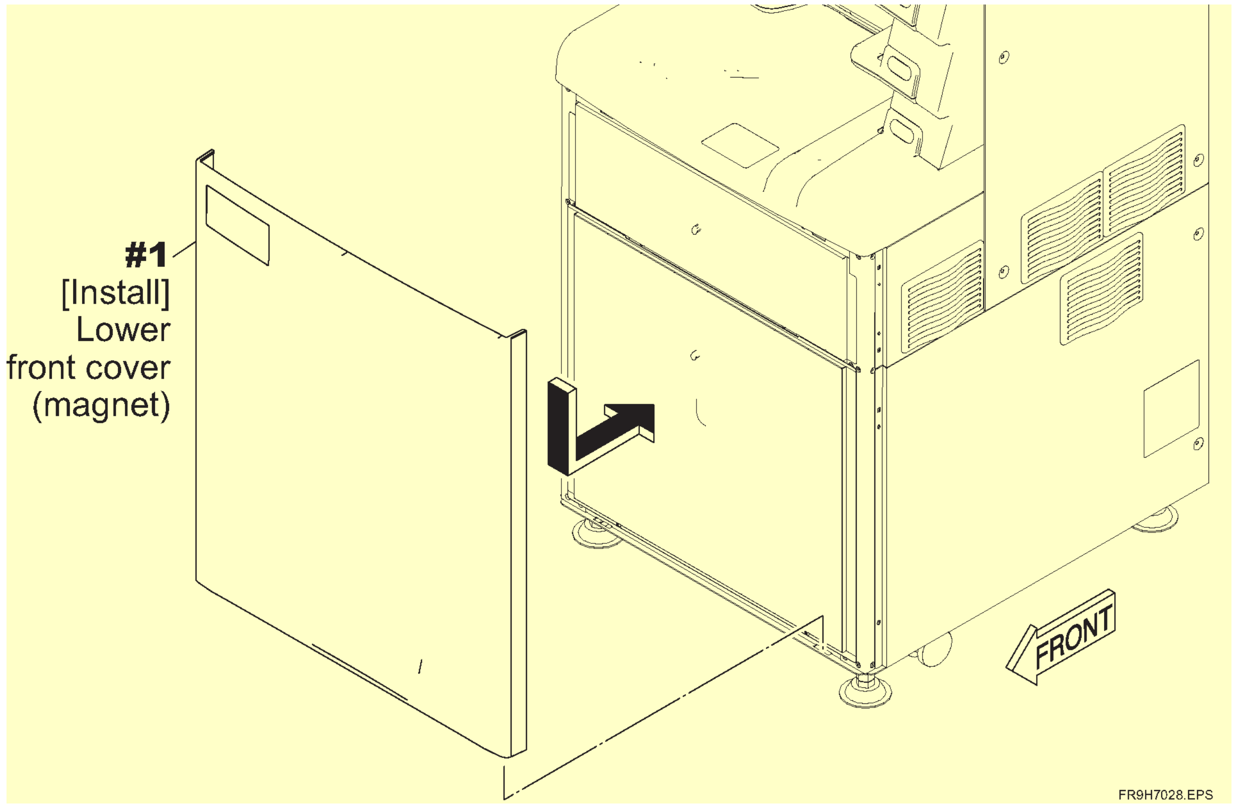
☞ *{IN: Appendix 4._Setting the Both-Side Cassette Identification Barcode Reader}*

4.4 Installing the Cover

1. **Install the lower light protect plate.**


#1
[Secure]
T4x8 (x4)
Lower light protect plate
FRONT
FR9H7030.EPS

2. **Install the front cover.**


#1
[Install]
Lower front cover (magnet)
FRONT
FR9H7028.EPS

5. Connecting the Cables

5.1 Connecting the Power Cable and Checking Resistance Value

CAUTIONS

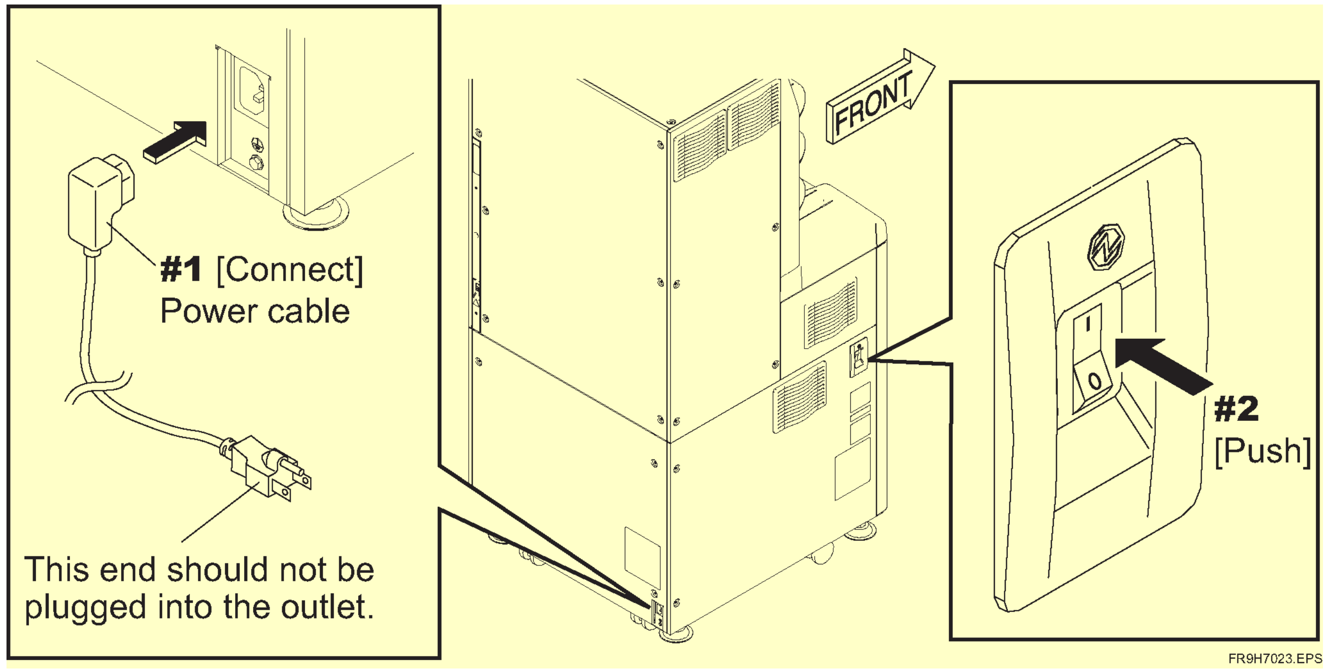
- ***Before measuring the resistance value, make sure that the power plug is unplugged from the outlet.***
- ***If the machine is to be installed in the patient environment, see "APPENDIX 1. ADDITIONAL PROTECTIVE GROUNDING."***

  ☞ *{IN:APPENDIX 1._ADDITIONAL PROTECTIVE GROUNDING}*
- ***If the power cable is to be locally prepared, be sure to use a power cable that complies with the requirements stated below.***

  <For the U.S. and Canada>
    - *UL-listed detachable power cable*
    - *Hospital Grade plug*
    - *Cable wire diameter : 16 AWG or larger, 3-conductor*
    - *Rated voltage: 125 VAC or higher*
    - *Cable type: SJT*
    - *Cable length: 3 m or shorter*

  <For Europe>
    - *Cable certified by a country in which the machine is to be installed*
    - *Cable wire diameter: 1.0 mm2 or larger, 3-conductor*
    - *Rated voltage: 250 VAC or higher*
    - *Cable type: H05VV-F*
    - *Cable length: 3 m or shorter*

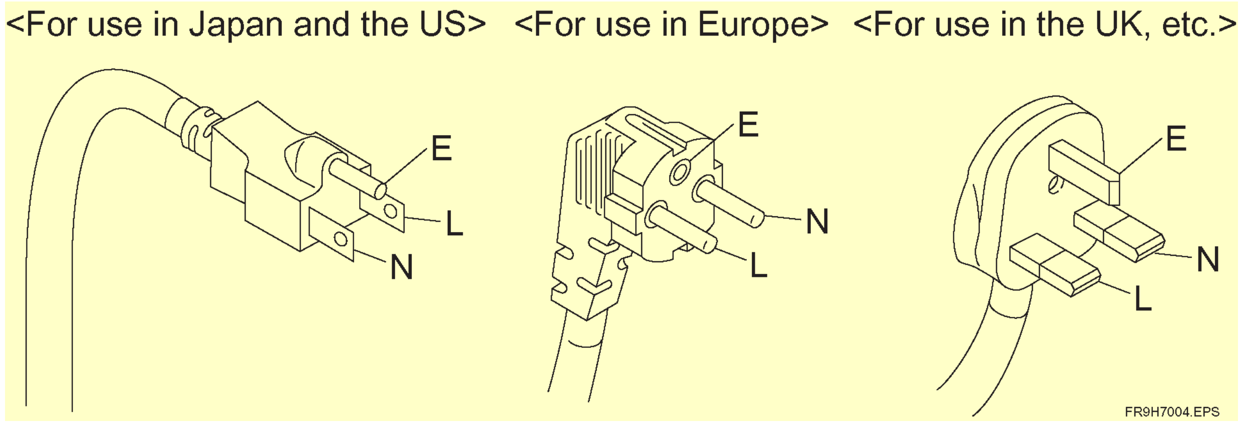
1. **Connect the power cable to the machine, and place the breaker switch in the ON position.**



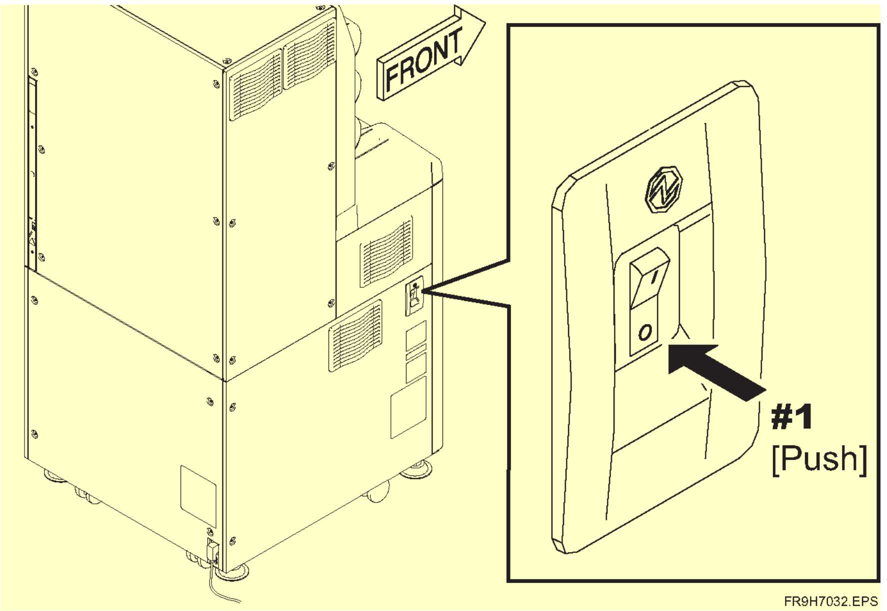
2. **Measure the resistance value of the power cable.**

(Reference value)

Terminal	L - N	L - E	N - E
Resistance value	100k Ω -	∞	∞



3. **Place the breaker switch in the OFF position.**


FRONT
#1
[Push]
FR9H7032.EPS

5.2 Connecting the Interface Cable

⚠ CAUTION

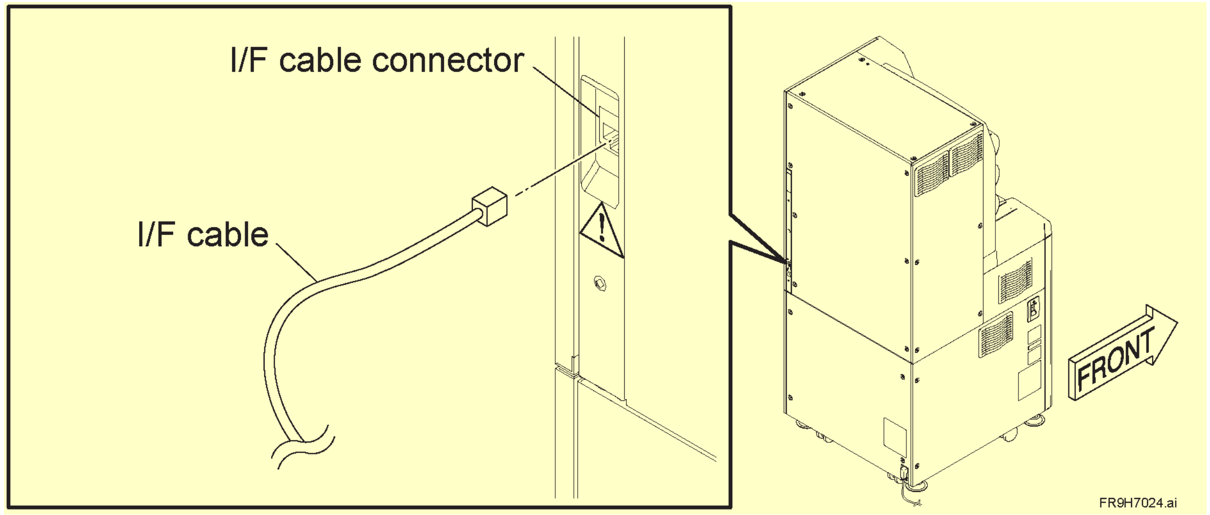
A telephone cable should not be plugged into the I/F cable connector.
The type of cable compatible with this machine is an IEC950/UL1950-listed cable only.

◆ NOTE ◆

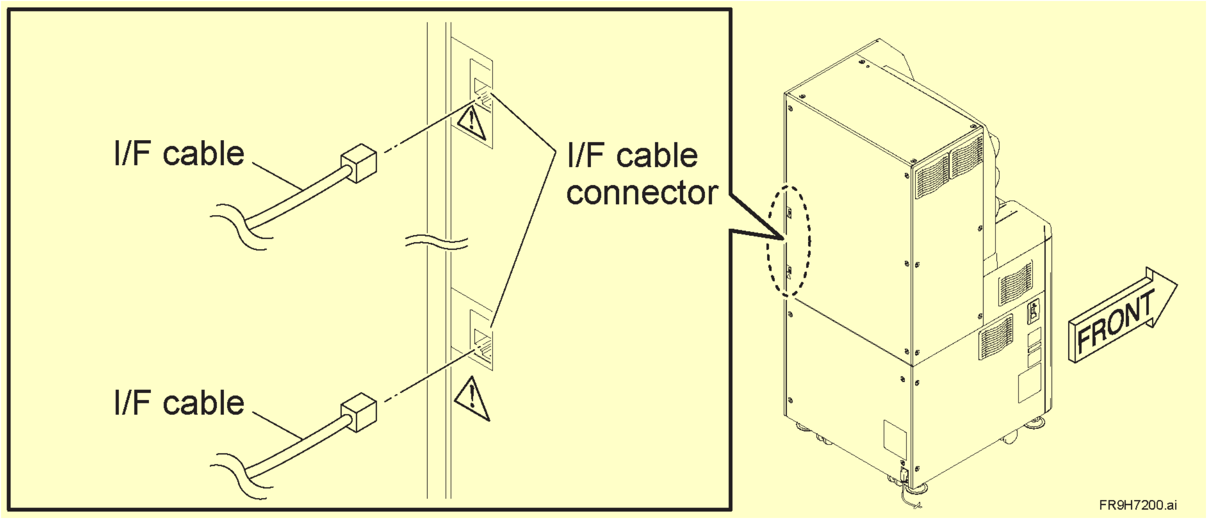
For the I/F cable, only the straight cable of UTP type should be used.

1. Connect the I/F cable to the I/F cable connector of the machine.

- Without remote power controller (option)


I/F cable connector
I/F cable
FRONT
FR9H7024.ai

- With remote power controller (option)

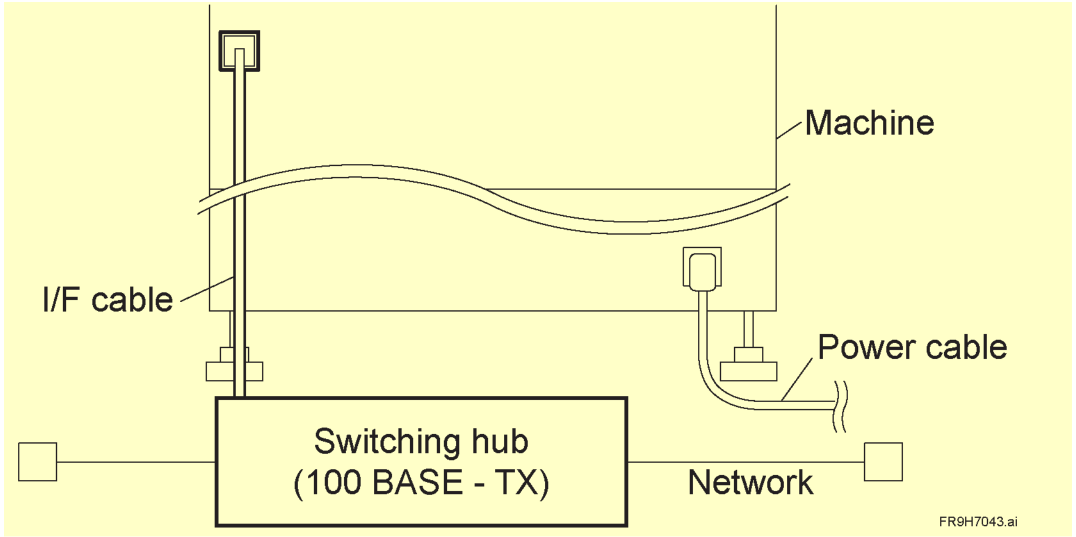

I/F cable
I/F cable connector
I/F cable
FRONT
FR9H7200.ai

2. Connect the I/F cable to the switching hub.

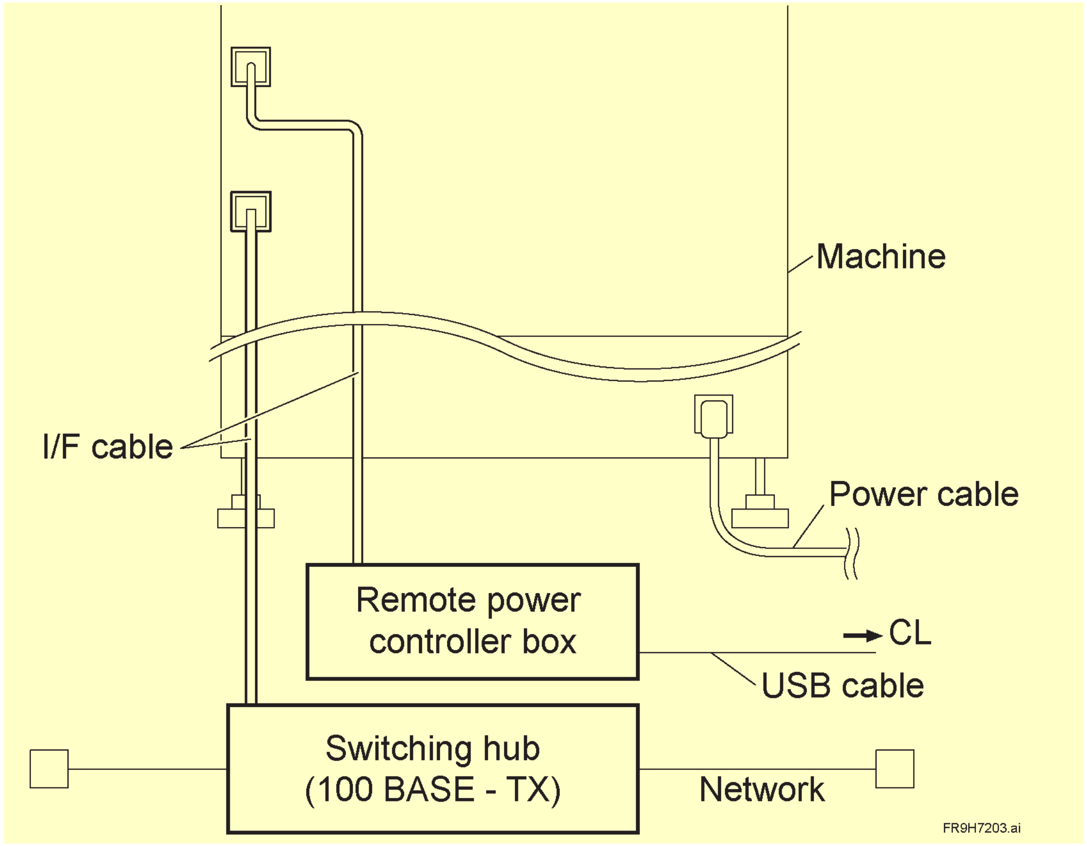
⚠ CAUTION

Only device evaluated to IEC/UL60905-1 can be used.

- Without remote power controller (option)


Machine
I/F cable
Power cable
Switching hub
(100 BASE - TX)
Network
FR9H7043.ai

- With remote power controller (option)


Machine
I/F cable
Power cable
Remote power
controller box
CL
USB cable
Switching hub
(100 BASE - TX)
Network
FR9H7203.ai

6. Final Placement

For final placement of the machine, check the requests of the user, and observe the procedures described below to secure the machine and cables in place.
When the machine is to be secured by use of the anchor nuts, see "Appendix 4. Securing the Machine with the Anchor Nuts"

6.1 Securing the Cable

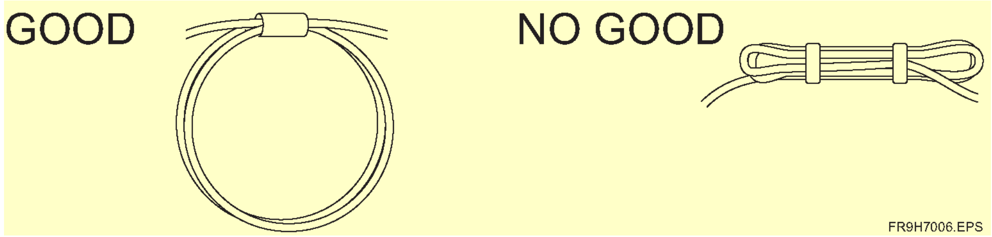
⚠ **CAUTION**

If the machine is to be installed in the patient environment, see "APPENDIX 1. ADDITIONAL PROTECTIVE GROUNDING."

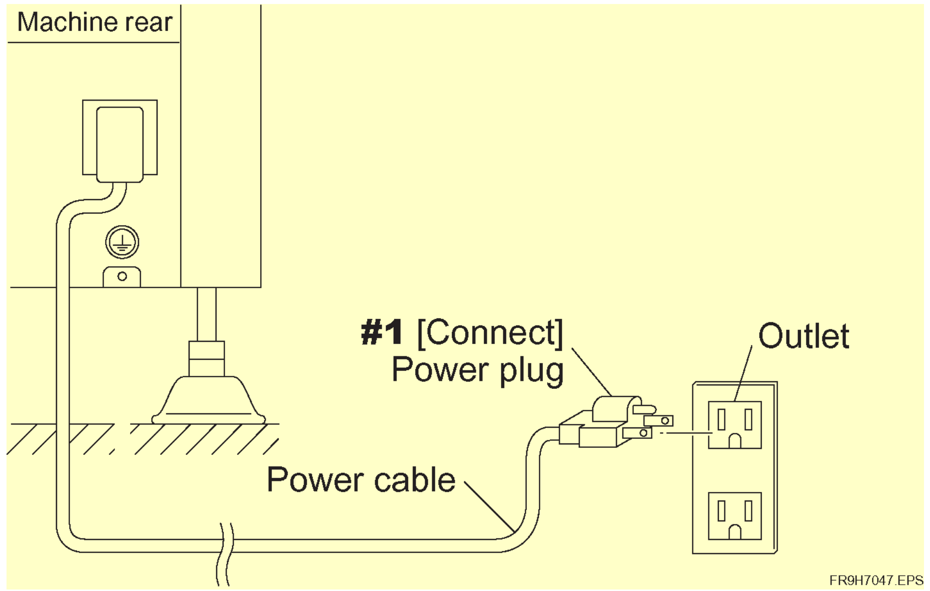
☞ *{IN:APPENDIX 1._ADDITIONAL PROTECTIVE GROUNDING}*

⚠ **CAUTION**

Do not tie or bundle the power cable in such a manner that it is overloaded.


GOOD
NO GOOD
FR9H7006.EPS

1. Plug the power cable into the outlet.


Machine rear
#1 [Connect]
Power plug
Outlet
Power cable
FR9H7047.EPS

6.2 Securing the Machine

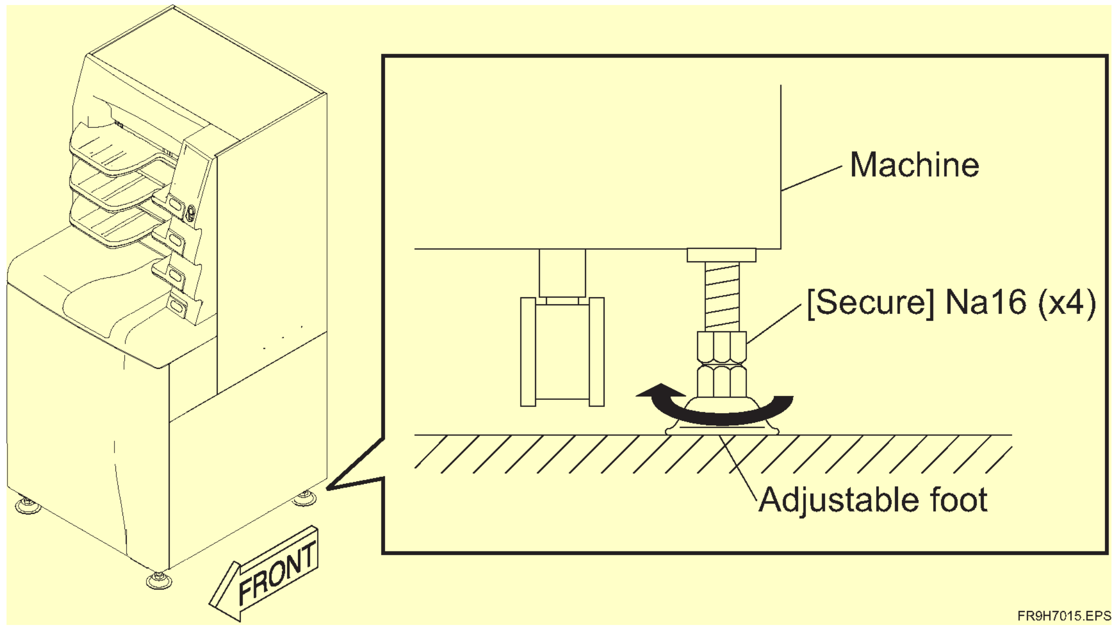
1. Secure the four adjustable feet down onto the floor.

◆ ***NOTE*** ◆

When securing the adjustable feet, pay attention to the following points.

- *The four adjustable feet should be evenly loaded.*
  However, if there is too little space on the right and left sides in the machine installation place to secure the adjustable feet on the rear side, the two adjustable feet on the front side should be secured in place. In this case, the two adjustable feet and two casters should be evenly loaded.
- *When the adjustable feet are secured, the casters should be detached from the floor.*

2. Secure the adjustable feet.


Machine
[Secure] Na16 (x4)
Adjustable foot
FRONT
FR9H7015.EPS

7. CL Installation Procedures

1. **Perform the CL installation procedures.**

◆ ***NOTE*** ◆

Complete "7. CL Installation Procedures" before performing the procedures described in "8. Installing RU Software."

☞ {FCR XG-1/CR CL Service Manual}

8. Installing RU Software

◆ ***INSTRUCTION*** ◆

If the OS of CL is Windows Vista, confirm the followings before installation.

- *The version of PC-TOOL is V4.0 or later.*
- *The UAC (User Account Control) is set to OFF. If the UAC is set to ON, set it to OFF, install the PC-TOOL, and install the RU software. After performing the procedures above, set back UAC to On again.*

◇ *REFERENCE* ◇

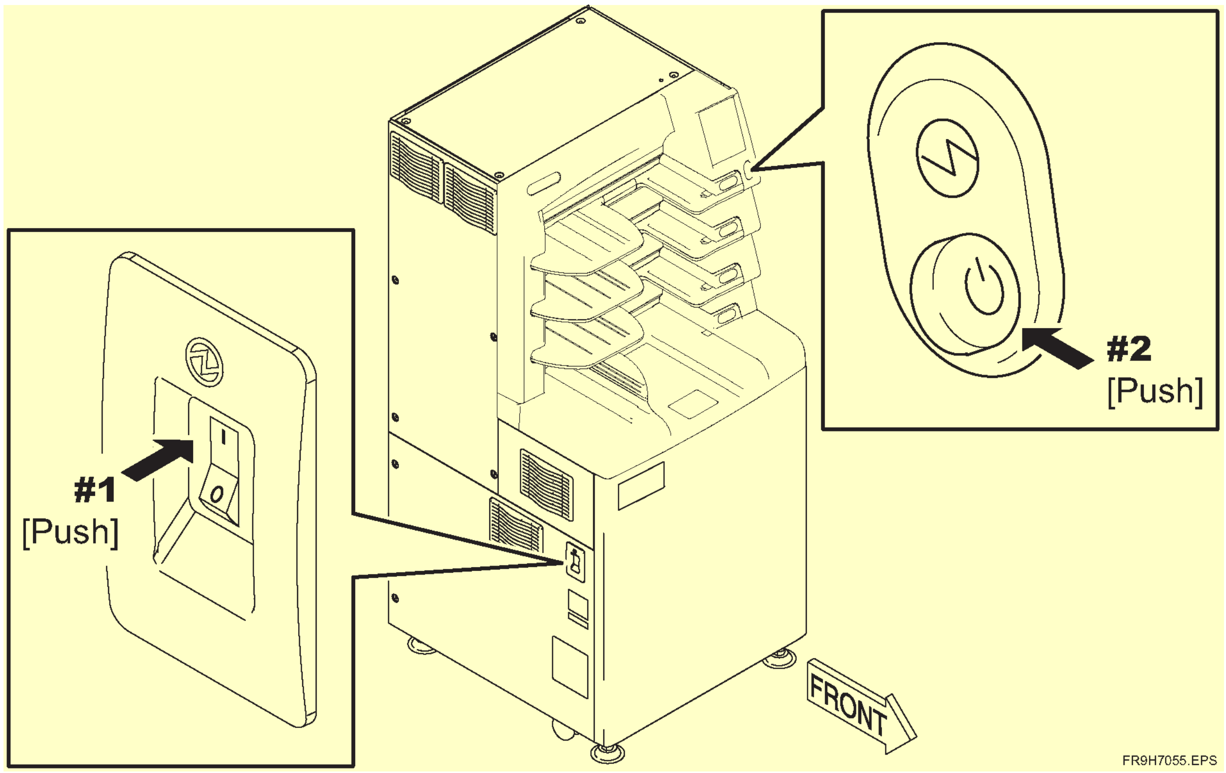
This chapter describes the procedures, by way of example, where settings are made as follows:

IP address of the RU : 172.16.1.11
IP address of the CL : 172.16.1.21

8.1 Setting the IP Address of the RU

1. **Turn ON the power of the CL.**

2. **Turn ON the power of the RU.**



3. Place the RU in the Maintenance Mode.

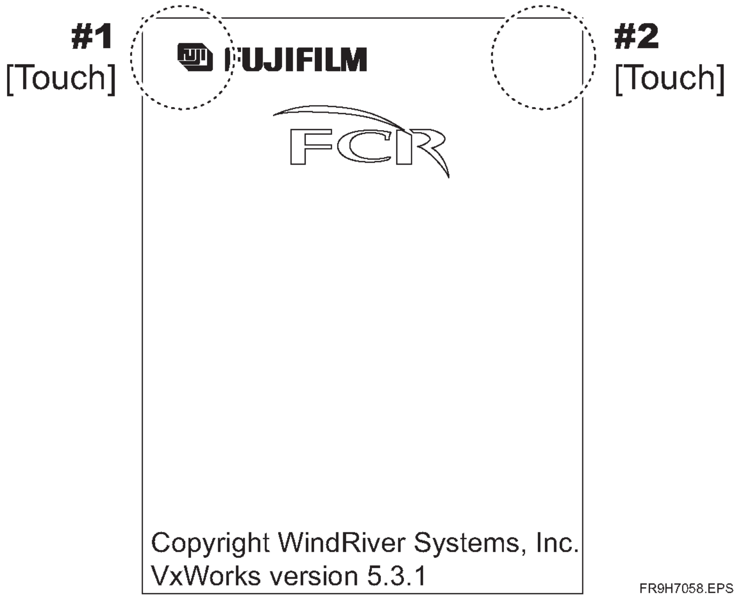
After the main screen appears, sequentially touch the upper left and upper right corners of the touch panel.

◆ **NOTE** ◆

Because the IP address of the FTP server has not been set yet, it takes about three minutes until the main screen appears.

◇ *REFERENCE* ◇

If your touch is accepted by the panel, a "beep" alarm sound is generated.


#1
[Touch]
#2
[Touch]
FUJIFILM
FCR
Copyright WindRiver Systems, Inc.
VxWorks version 5.3.1
FR9H7058.EPS

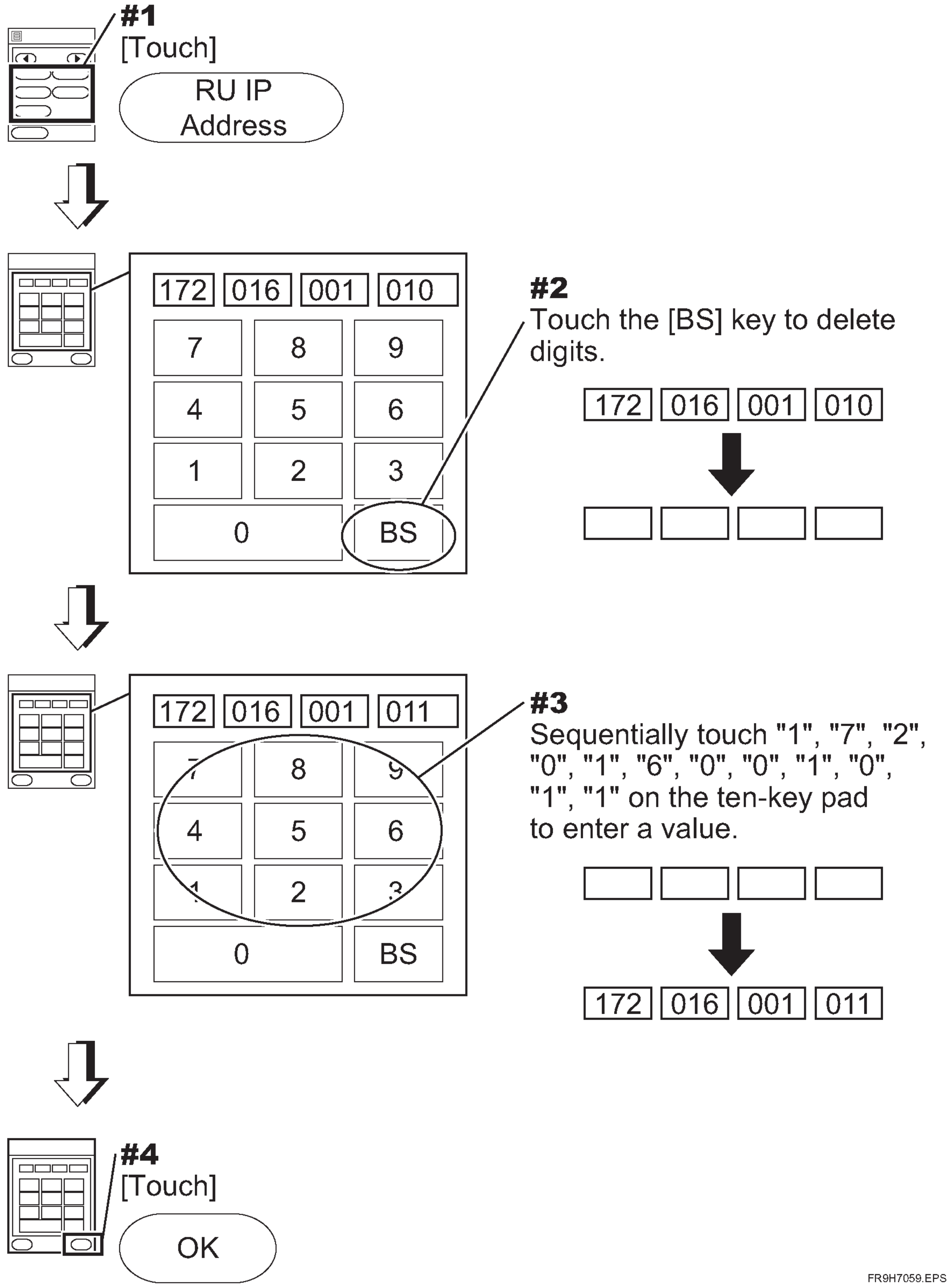
◆ **INSTRUCTION** ◆

If you cannot put the RU into the Maintenance Mode, turn OFF the power of the RU and then reboot the RU all over again.

4. Set the IP address of the RU.

◆ **NOTE** ◆

Enter the IP address of the RU that is set in the CL.


#1
[Touch]

#2
Touch the [BS] key to delete digits.

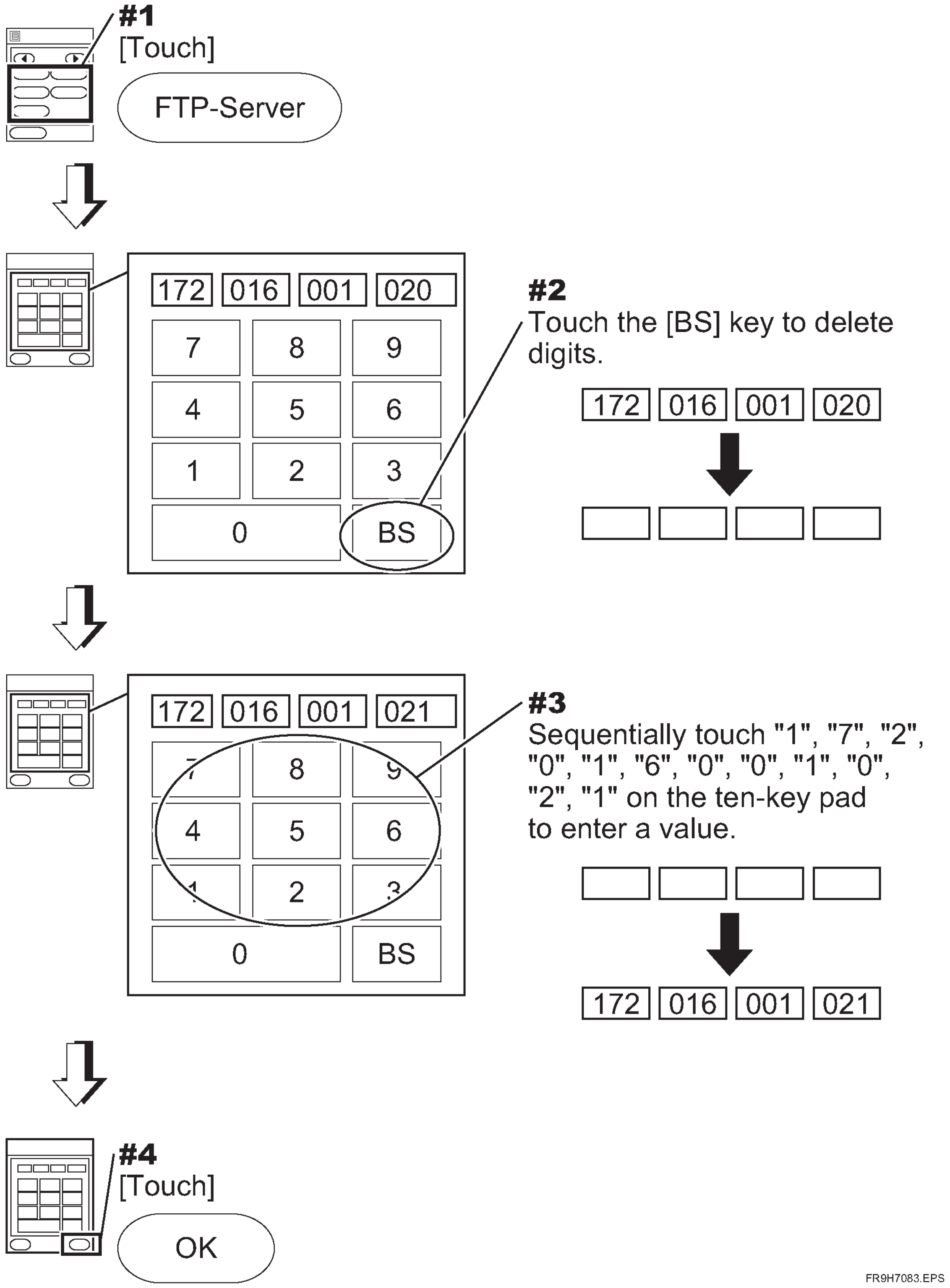
#3
Sequentially touch "1", "7", "2", "0", "1", "6", "0", "0", "1", "0", "1", "1" on the ten-key pad to enter a value.

#4
[Touch]
RU IP Address
172
016
001
010
7
8
9
4
5
6
1
2
3
0
BS
172
016
001
011
OK
FR9H7059.EPS

5. **Set the IP address of the FTP server.**

◆ NOTE ◆

Enter the IP address of the CL.



#1
[Touch]
FTP-Server

#2
Touch the [BS] key to delete digits.

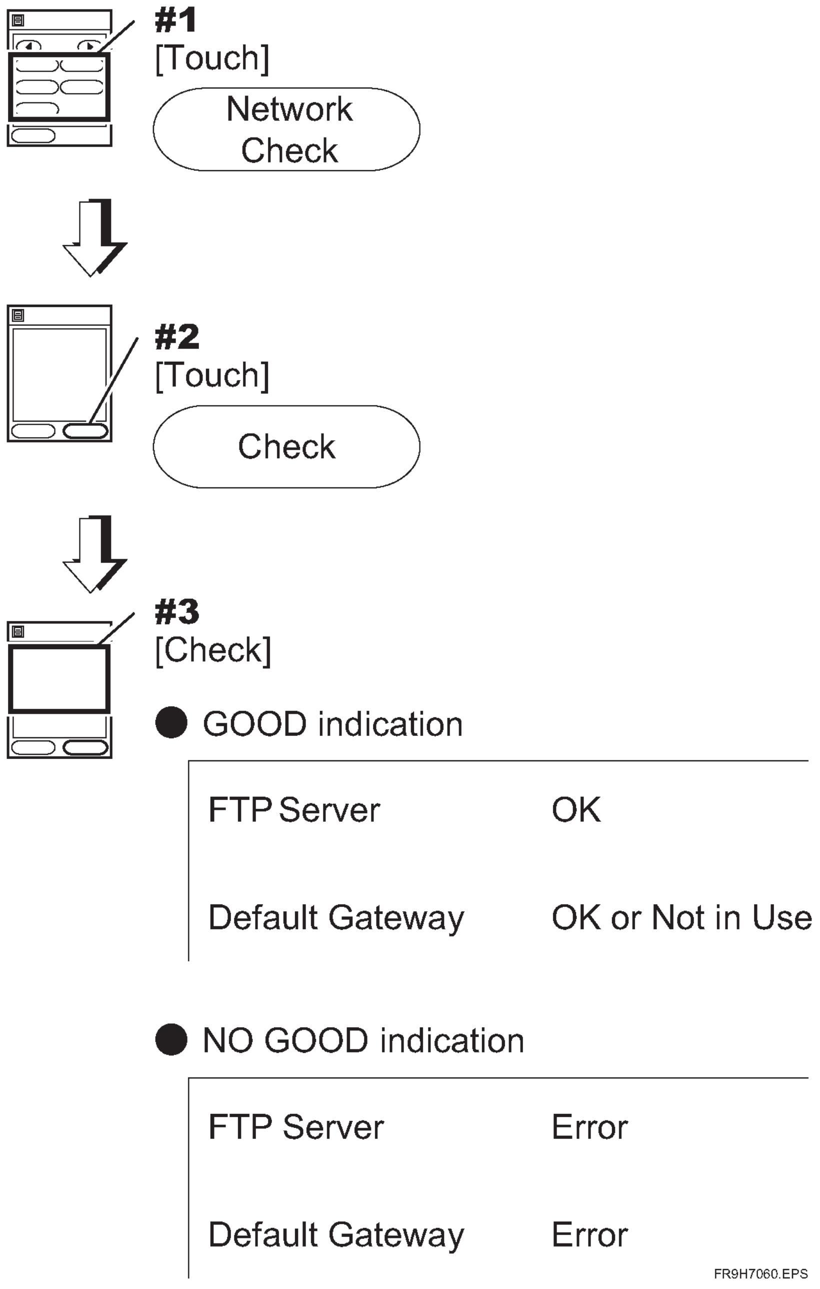
#3
Sequentially touch "1", "7", "2", "0", "1", "6", "0", "0", "1", "0", "2", "1" on the ten-key pad to enter a value.

#4
[Touch]
OK

172 016 001 020
7 8 9
4 5 6
1 2 3
0 BS
172 016 001 021
FR9H7083.EPS

8.2 Setting the CL and Checking Connection

1. **Execute "Network Check".**



#1
[Touch]
Network Check

#2
[Touch]
Check

#3
[Check]

- GOOD indication

FTP Server	OK
Default Gateway	OK or Not in Use

- NO GOOD indication

FTP Server	Error
Default Gateway	Error

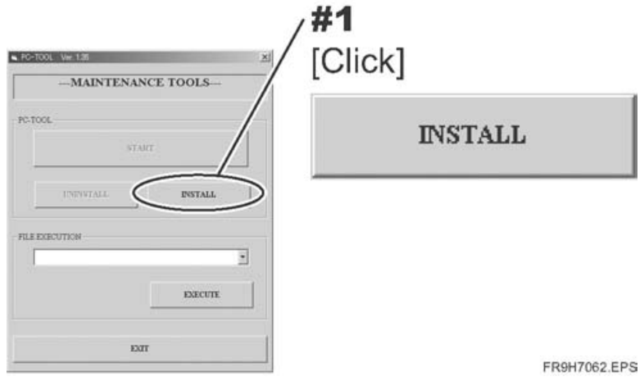
FR9H7060.EPS

◆ NOTE ◆

In the case of "NO GOOD" indication
☞ *{Troubleshooting}*

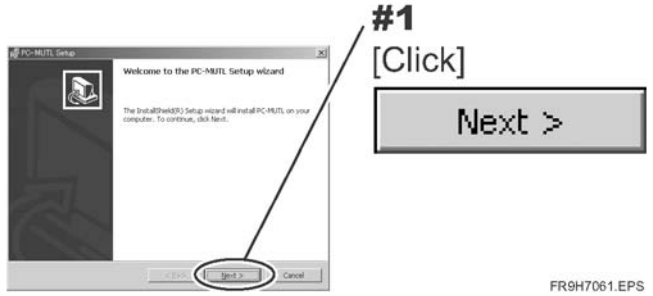
8.3 Installing Setup PC-TOOL

1. **Put the Install CD-ROM into the CD-ROM drive of the CL.**
2. **Click on [INSTALL].**


PC-TOOL Ver. 1.35
---MAINTENANCE TOOLS---
PC-TOOL
START
UNINSTALL
INSTALL
FILE EXECUTION
EXECUTE
EXIT
#1
[Click]
INSTALL

FR9H7062.EPS

3. **Click on [NEXT].**

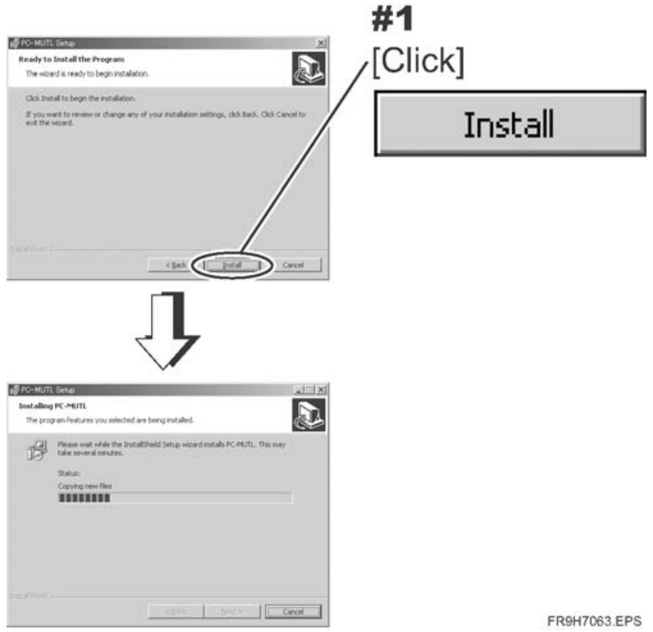

PC-MUTL Setup
< Back
Next >
Cancel
#1
[Click]
Next >

Welcome to the PC-MUTL Setup wizard

The InstallShield(R) Setup wizard will install PC-MUTL on your computer. To continue, click Next.

FR9H7061.EPS

4. **Click on [Install].**


PC-MUTL Setup
InstallShield
< Back
Install
Cancel
#1
[Click]
Install
PC-MUTL Setup
InstallShield
< Back
Next >
Cancel

Ready to Install the Program

The wizard is ready to begin installation.

Click Install to begin the installation.

If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.

Installing PC-MUTL

The program features you selected are being installed.

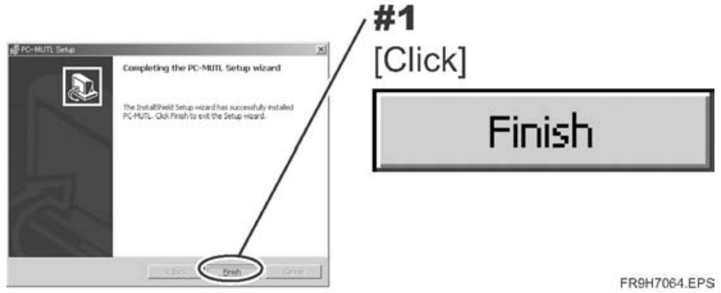
Please wait while the InstallShield Setup wizard installs PC-MUTL. This may take several minutes.

Status:

Copying new files

FR9H7063.EPS

5. **When Install is completed, click on [Finish].**


PC-MUTL Setup
< Back
Finish
Cancel
#1
[Click]
Finish

Completing the PC-MUTL Setup wizard

The InstallShield Setup wizard has successfully installed PC-MUTL. Click Finish to exit the Setup wizard.

FR9H7064.EPS

◆ ***NOTE*** ◆

The step 6 need not be carried out when the CL has been rebooted after the CL's IP address is changed during "7. CL Installation Procedures". Proceed to "8.4 RU/CL Software Setup Checkpoints".

---

6. **Reboot the CL.**

8.4 RU/CL Software Setup Checkpoints

◆ *NOTE* ◆

If it is necessary to check the setup of the RU/CL software, perform the checking procedures in accordance with the table below.

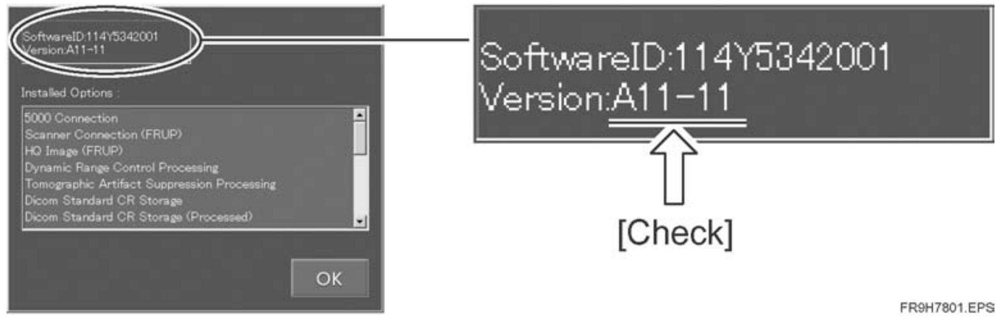
	Checkpoints	Refer to
1	Checking the CL Software Version	☞**{IN:8.4.1}**
2	Checking Configuration of the CL - 1	☞**{IN:8.4.2}**
3	Checking Configuration of the CL - 2	☞**{IN:8.4.3}**
4	Checking Configuration of the CL - 3	☞**{IN:8.4.4}**
5	Checking Configuration of the CL - 4	☞**{IN:8.4.5}**
6	Checking FTP of the CL - 1	☞**{IN:8.4.6}**
7	Checking FTP of the CL - 2	☞**{IN:8.4.7}**
8	Checking Setup of the RU	☞**{IN:8.4.8}**

◇ *REFERENCE* ◇

All the CL software settings to be checked must be for the master CL.

8.4.1 Checking the CL Software Version

1. Make sure that the CL software version is "A11-11" or later.



SoftwareID:114Y5342001
Version:A11-11

Installed Options :

5000 Connection
Scanner Connection (FRUP)
HQ Image (FRUP)
Dynamic Range Control Processing
Tomographic Artifact Suppression Processing
Dicom Standard CR Storage
Dicom Standard CR Storage (Processed)

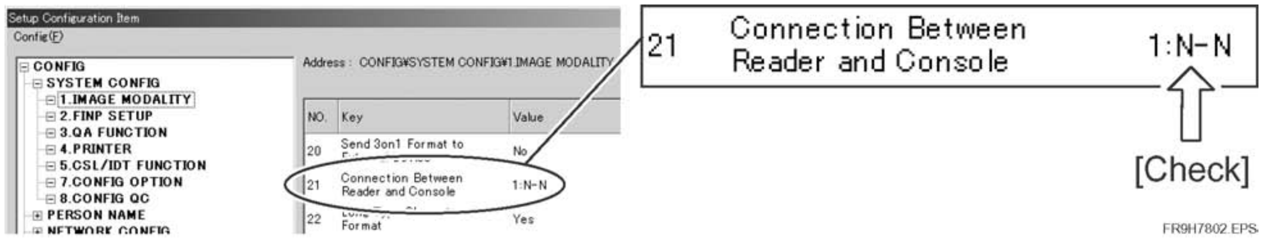
FR9H7801.EPS

8.4.2 Checking Configuration of the CL - 1

1. **On the Setup Configuration Item screen, make sure that "CONFIG" → "1. IMAGE MODALITY" → "21. Connecting Between Reader and Console" is "1:N-N".**

◆ ***NOTE*** ◆

If the setting is “0:1-1”, the machine does not convey the IP and logs error code “11510” because the setting is out of the machine specification.



Address : CONFIG¥SYSTEM CONFIG¥1.IMAGE MODALITY

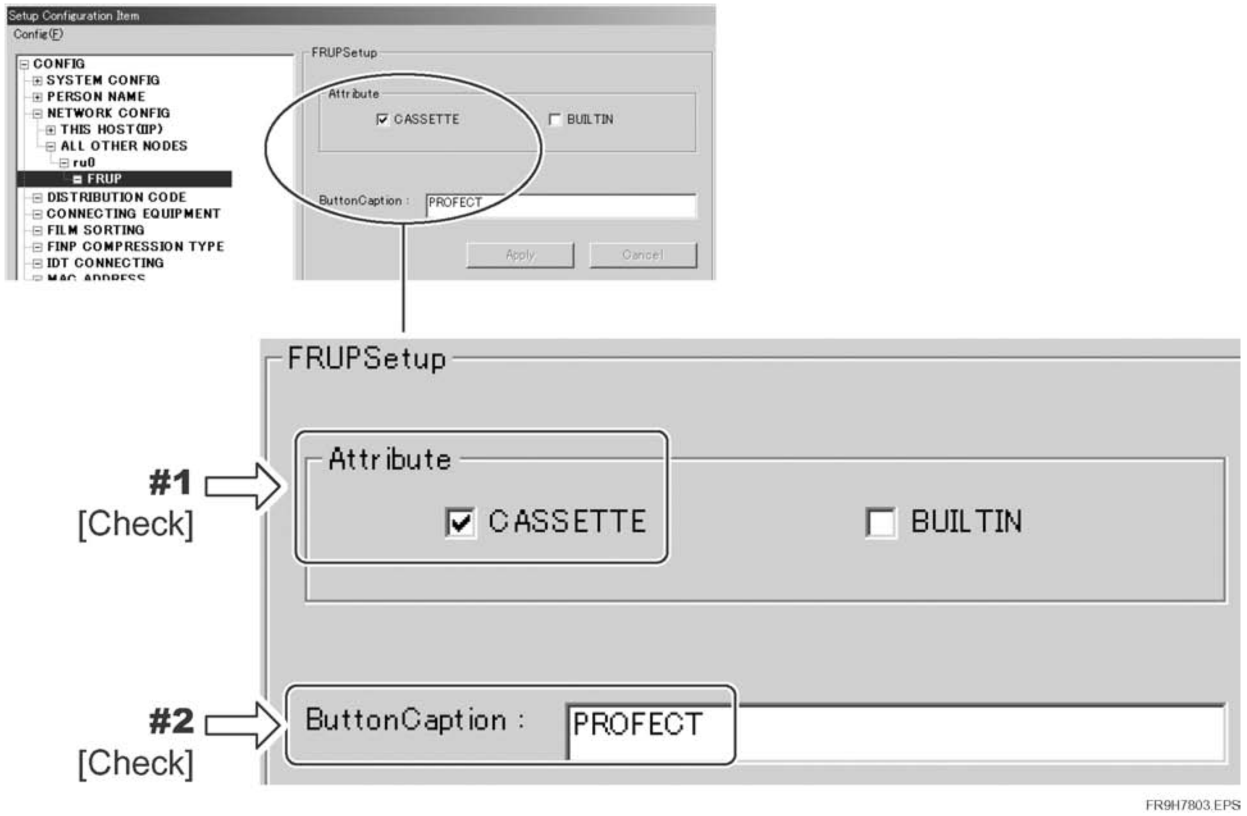
NO.	Key	Value
20	Send 3on1 Format to	No
21	Connection Between Reader and Console	1:N-N
22	Format	Yes

21 Connection Between Reader and Console 1:N-N

Setup Configuration Item
Config(F)
CONFIG
SYSTEM CONFIG
1.IMAGE MODALITY
2.FINP SETUP
3.QA FUNCTION
4.PRINTER
5.CSL/IDT FUNCTION
7.CONFIG OPTION
8.CONFIG QC
PERSON NAME
NETWORK CONFIG
[Check]
FR9H7802.EPS

8.4.3 Checking Configuration of the CL - 2

1. **On the Setup Configuration Item screen, navigate "CONFIG" → "NETWORK CONFIG" → "ALL OTHER NODES", and make sure that the "FRUP Setup" settings of the RU installed are as follows.**



FRUPSetup

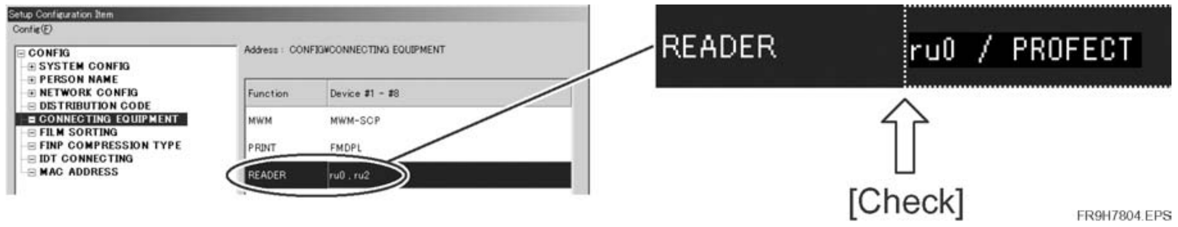
Attribute: ☑ CASSETTE ☐ BUILTIN

ButtonCaption : PROFECT

Setup Configuration Item
Config(F)
CONFIG
SYSTEM CONFIG
PERSON NAME
NETWORK CONFIG
THIS HOST(IP)
ALL OTHER NODES
ru0
FRUP
DISTRIBUTION CODE
CONNECTING EQUIPMENT
FILM SORTING
FINP COMPRESSION TYPE
IDT CONNECTING
MAC ADDRESS
Apply
Cancel
#1 [Check]
#2 [Check]
FR9H7803.EPS

8.4.4 Checking Configuration of the CL - 3

1. On the Setup Configuration Item screen, navigate "CONFIG" → "CONNECTING EQUIPMENT", and make sure that the RU has been registered in the "READER" attribute.


Setup Configuration Item
Config(F)
CONFIG
SYSTEM CONFIG
PERSON NAME
NETWORK CONFIG
DISTRIBUTION CODE
CONNECTING EQUIPMENT
FILM SORTING
FINP COMPRESSION TYPE
IDT CONNECTING
MAC ADDRESS
[Check]

Address : CONFIG¥CONNECTING EQUIPMENT

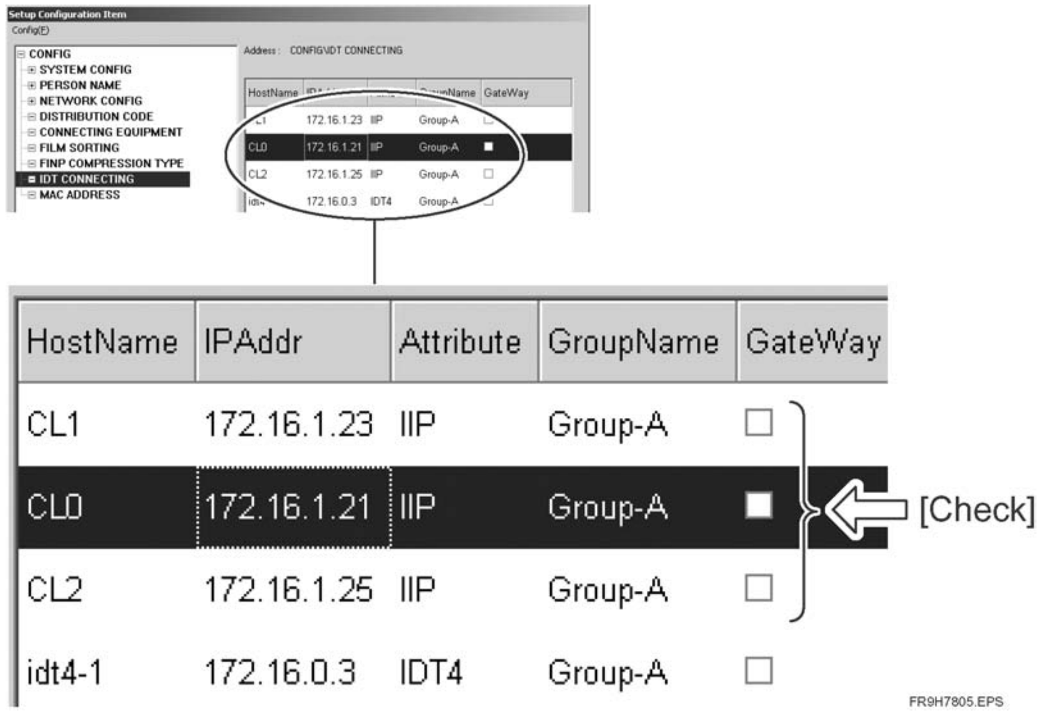
Function	Device #1 - #8
MWM	MWM-SCP
PRINT	FMDPL
READER	ru0 , ru2

READER	ru0 / PROFECT

FR9H7804.EPS

8.4.5 Checking Configuration of the CL - 4

1. If multiple CL's are registered and image reading is performed with a specific RU, make sure that the CL has been set to "IDT CONNECTING".


Setup Configuration Item
Config(F)
CONFIG
SYSTEM CONFIG
PERSON NAME
NETWORK CONFIG
DISTRIBUTION CODE
CONNECTING EQUIPMENT
FILM SORTING
FINP COMPRESSION TYPE
IDT CONNECTING
MAC ADDRESS
[Check]

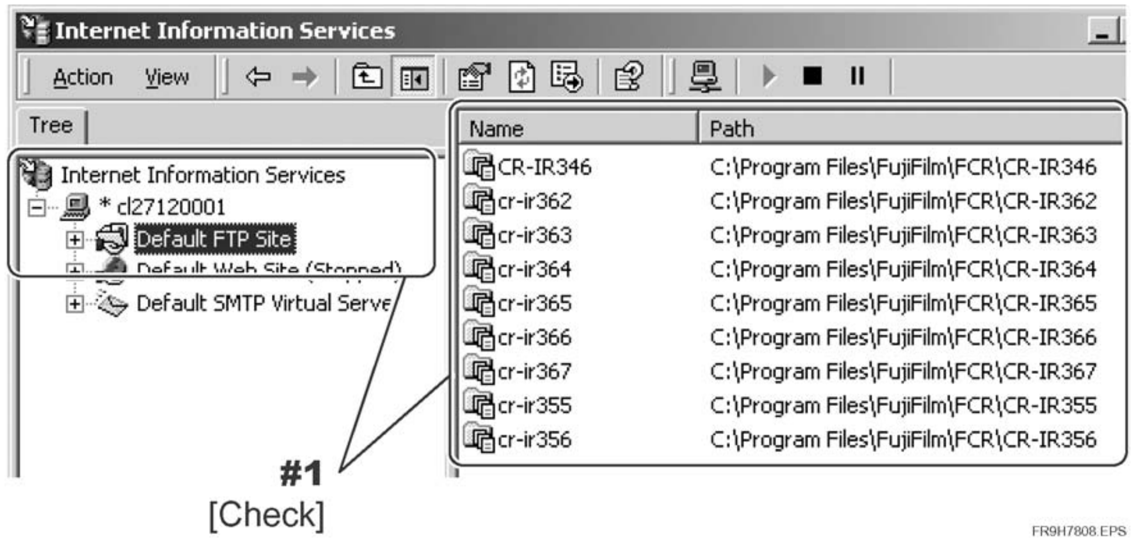
Address : CONFIG\IDT CONNECTING

HostName	IPAddr	Attribute	GroupName	GateWay
CL1	172.16.1.23	IIP	Group-A	☐
CL0	172.16.1.21	IIP	Group-A	■
CL2	172.16.1.25	IIP	Group-A	☐
idt4-1	172.16.0.3	IDT4	Group-A	☐

FR9H7805.EPS

8.4.6 Checking FTP of the CL - 1

1. **From the "Start" menu of Windows, navigate "Settings" → "Control Panel" → "Administrative Tools" → "Internet Service Manager", and click on "Default FTP Site" of "Internet Information Services" to make sure that virtual directories have been created for respective RU's and their paths have been specified.**

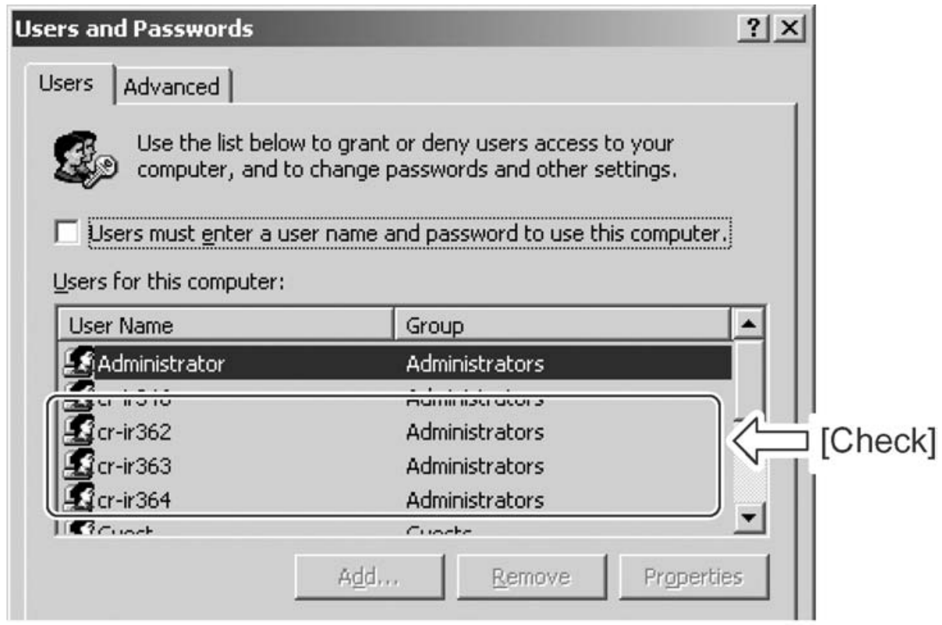

Internet Information Services
Action
View
Tree
Internet Information Services
* cl27120001
Default FTP Site
Default Web Site (Stopped)
Default SMTP Virtual Serve
#1
[Check]

Name	Path
CR-IR346	C:\Program Files\FujiFilm\FCR\CR-IR346
cr-ir362	C:\Program Files\FujiFilm\FCR\CR-IR362
cr-ir363	C:\Program Files\FujiFilm\FCR\CR-IR363
cr-ir364	C:\Program Files\FujiFilm\FCR\CR-IR364
cr-ir365	C:\Program Files\FujiFilm\FCR\CR-IR365
cr-ir366	C:\Program Files\FujiFilm\FCR\CR-IR366
cr-ir367	C:\Program Files\FujiFilm\FCR\CR-IR367
cr-ir355	C:\Program Files\FujiFilm\FCR\CR-IR355
cr-ir356	C:\Program Files\FujiFilm\FCR\CR-IR356

FR9H7808.EPS

8.4.7 Checking FTP of the CL - 2

1. **From the "Start" menu of Windows, navigate "Settings" → "Control Panel" → "Users and Passwords", and make sure that user names and passwords have been set to allow the RU to automatically access the FTP.**


Users and Passwords
Users
Advanced
Add...
Remove
Properties
[Check]

Use the list below to grant or deny users access to your computer, and to change passwords and other settings.

☐ Users must enter a user name and password to use this computer.

Users for this computer:

User Name	Group
Administrator	Administrators
cr-ir346	Administrators
cr-ir362	Administrators
cr-ir363	Administrators
cr-ir364	Administrators
Guest	Guests

FR9H7809.EPS

8.4.8 Checking Setup of the RU

1. Check "IP Address of the RU" and "IP Address of the FTP Server" that have been set in the RU.

◆ *NOTE* ◆

With reference to "8.1 Setting the IP Address of the RU", check the "IP Address of the RU" and "IP Address of the FTP Server" that have been set in the RU.

☞ *{IN:8.1_Setting the IP Address of the RU}*

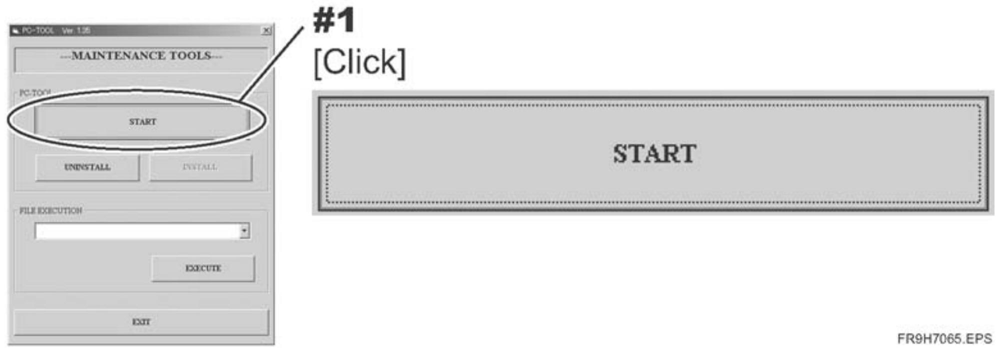
8.5 Installing RU Software

◇ *REFERENCE* ◇

This section describes the procedures, by way of example, where settings are made as follows:

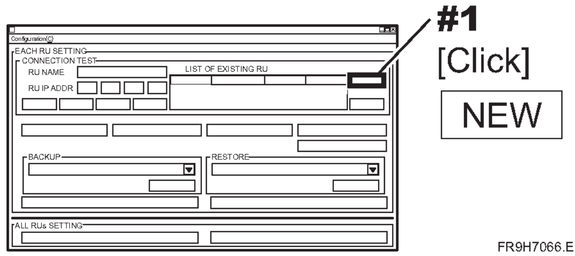
INSTALL VERSION: 1.1
LANGUAGE: Japanese
BRAND TYPE: JAPAN (FMS)

1. Click on [START].


PD-TOOL Ver. 1.20
MAINTENANCE TOOLS
PD-TOOL
START
UNINSTALL
INSTALL
FILE EXECUTION
EXECUTE
EXIT
#1
[Click]
START

FR9H7065.EPS

2. Click on [NEW].

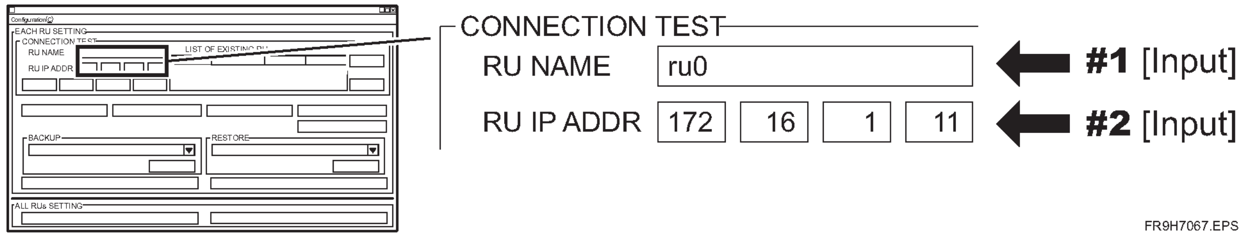

Configuration
EACH RU SETTING
CONNECTION TEST
RU NAME
RU IP ADDR
LIST OF EXISTING RU
BACKUP
RESTORE
ALL RUs SETTING
#1
[Click]
NEW

FR9H7066.EPS

3. Enter Install "RU NAME" and "RU IP ADDR".

◆ *NOTE* ◆

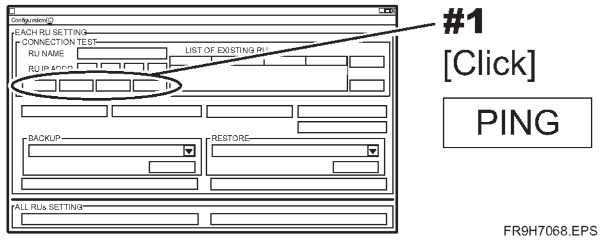
The IP address of the RU that is set in the CL should be entered.


Configuration
EACH RU SETTING
LIST OF EXISTING RU
BACKUP
RESTORE
ALL RUs SETTING
#1 [Input]
#2 [Input]

CONNECTION TEST
RU NAME ru0
RU IP ADDR 172 16 1 11

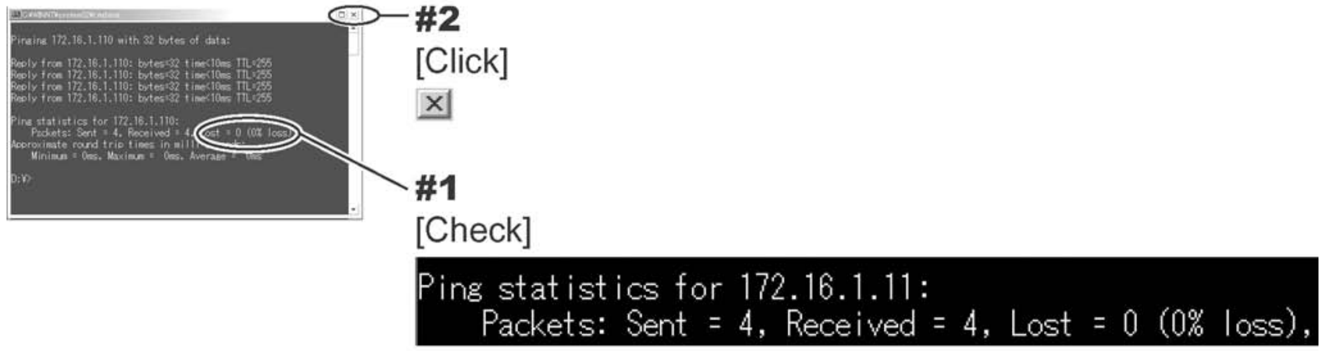
FR9H7067.EPS

4. Click on [PING].


EACH RU SETTING
CONNECTION TEST
RU NAME
LIST OF EXISTING RU
BACKUP
RESTORE
ALL RUs SETTING
#1
[Click]
PING

FR9H7068.EPS

5. Check the result of PING, and click on ☒ to close the window.


#2
[Click]
☒
#1
[Check]

```
Ping statistics for 172.16.1.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

FR9H7069.EPS

- [GOOD indication]

  The result is normal when the following message appears.

  | Ping statistics for 172.16.1.11: |
  | Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), |

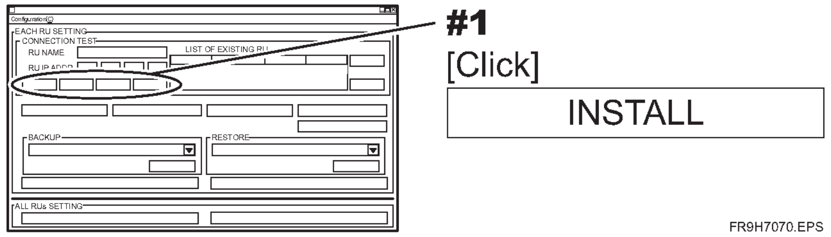
- [NO GOOD indication]

  Other than above.

◆ **NOTE** ◆

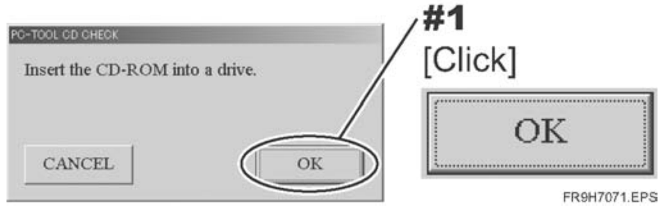
In the case of "NO GOOD" indication
☞ *{Troubleshooting}*

6. Click on [INSTALL].


EACH RU SETTING
CONNECTION TEST
RU NAME
LIST OF EXISTING RU
BACKUP
RESTORE
ALL RUs SETTING
#1
[Click]
INSTALL

FR9H7070.EPS

7. Click on [OK].


#1
[Click]

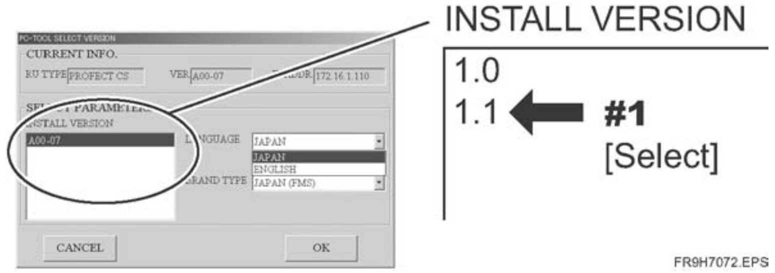
PC-TOOL CD CHECK

Insert the CD-ROM into a drive.

CANCEL
OK
OK

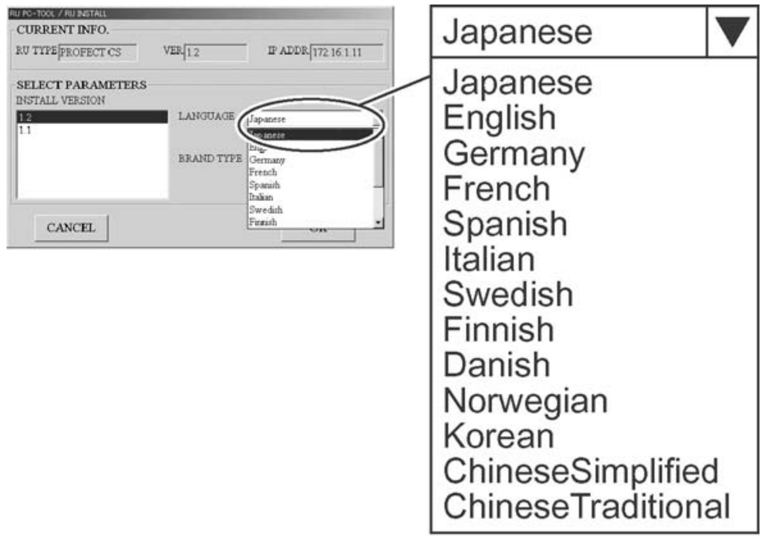
FR9H7071.EPS

8. Select "INSTALL VERSION".


PC-TOOL SELECT VERSION
CURRENT INFO.
RU TYPE PROFECT CS
VER A00-07
IP ADDR 172.16.1.110
SELECT PARAMETERS
INSTALL VERSION
A00-07
LANGUAGE JAPAN
JAPAN
ENGLISH
BRAND TYPE JAPAN (FMS)
CANCEL
OK
INSTALL VERSION
1.0
1.1
#1
[Select]

FR9H7072.EPS

9. Select "LANGUAGE".

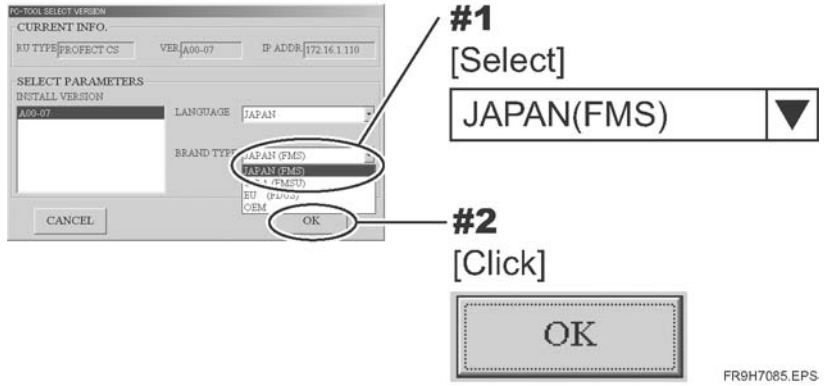

RU PC-TOOL / RU INSTALL
CURRENT INFO.
RU TYPE PROFECT CS
VER 1.2
IP ADDR 172.16.1.11
SELECT PARAMETERS
INSTALL VERSION
1.2
1.1
LANGUAGE
BRAND TYPE
CANCEL
Japanese
Japanese
English
Germany
French
Spanish
Italian
Swedish
Finnish
Danish
Norwegian
Korean
ChineseSimplified
ChineseTraditional

FR9H7086.EPS

◇ *REFERENCES* ◇

- *When the employed software version is 1.2 or later, all the languages are selectable.*
- *When the employed software version is 1.1 or earlier, the selectable languages are limited to “Japanese” and “English”.*

10. Select "BRAND TYPE" and click on [OK].


PC-TOOL SELECT VERSION
#1
[Select]
JAPAN(FMS)
#2
[Click]
OK
CANCEL

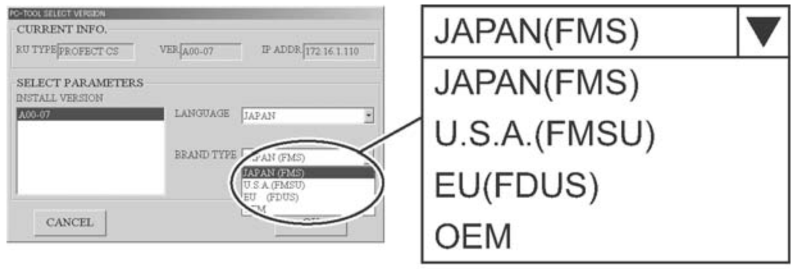
CURRENT INFO.
RU TYPE PROFECT CS
VER. A00-07
IP ADDR. 172.16.1.110

SELECT PARAMETERS
INSTALL VERSION A00-07
LANGUAGE JAPAN
BRAND TYPE JAPAN (FMS)

FR9H7085.EPS

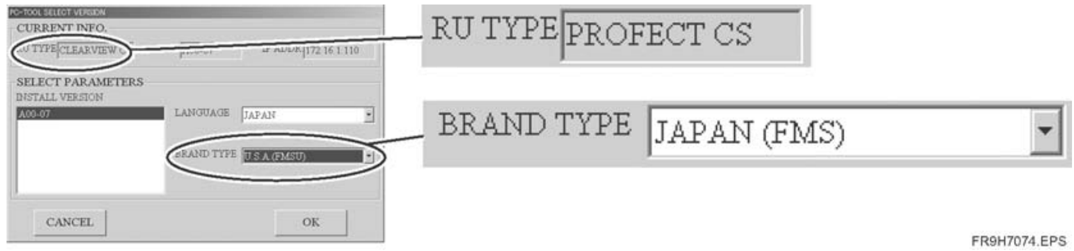
◇ REFERENCES ◇

- For "BRAND TYPE", either "JAPAN", "U.S.A.", "EU", or "OEM" may be selected.


JAPAN(FMS)
JAPAN(FMS)
U.S.A.(FMSU)
EU(FDUS)
OEM
CANCEL

FR9H7073.EPS

- "RU TYPE" is automatically changed, depending on "BRAND TYPE" selected.


RU TYPE CLEARVIEW
BRAND TYPE U.S.A.(FMSU)
CANCEL
OK

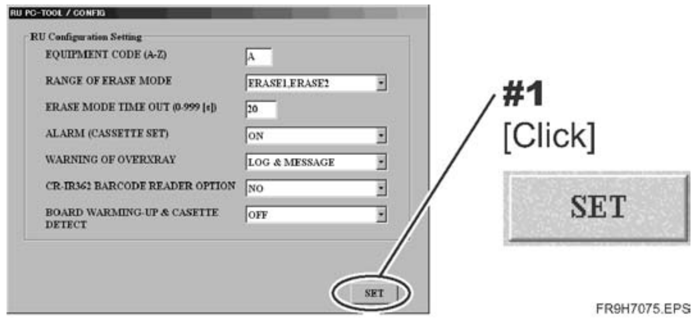
RU TYPE PROFECT CS
BRAND TYPE JAPAN (FMS)

FR9H7074.EPS

11. Click on [SET].

⚠ **CAUTION**

The warm-up function and the dummy cassette detection function are available as an option for only the units used in Japan. If the machine is used outside Japan, always set to “OFF”.


RU PC-TOOL / CONFIG
#1
[Click]
SET

RU Configuration Setting
EQUIPMENT CODE (A-Z) A
RANGE OF ERASE MODE ERASE1,ERASE2
ERASE MODE TIME OUT (0-999 [s]) 20
ALARM (CASSETTE SET) ON
WARNING OF OVERXRAY LOG & MESSAGE
CR-IR362 BARCODE READER OPTION NO
BOARD WARMING-UP & CASETTE DETECT OFF

FR9H7075.EPS

◇ REFERENCE ◇

If, for instance, the institution wishes to use nondefault CONFIGURATION information, edit the CONFIGURATION information by performing the procedure set forth under "4.3.12 EDIT CONFIGURATION" in the Maintenance Utility volume.

☞ *{MU:4.3.12_EDIT CONFIGURATION}*

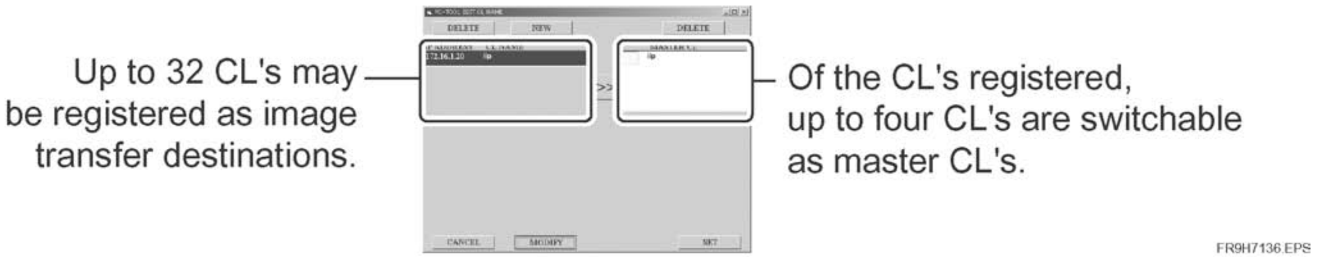
12. Set "IP ADDRESS" and "CL NAME".

◆ *INSTRUCTION* ◆

Enter IP ADDRESS of the CL to be connected with the RU.

◇ *REFERENCES* ◇

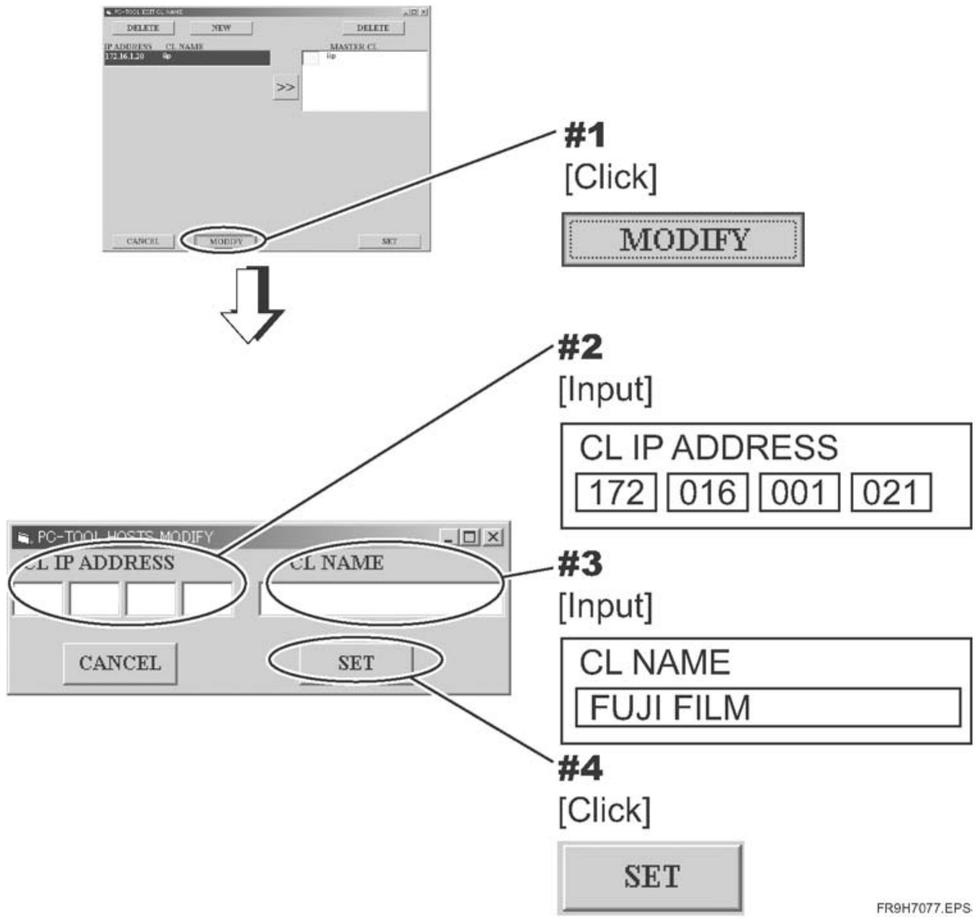
- *For "CL NAME", any name (20 bytes: 20 alphanumeric characters, or 10 Kanji characters) may be entered.*
- *Up to 32 CL's may be registered as image transfer destinations. Of the CL's registered, up to four CL's are switchable as master CL's.*


Up to 32 CL's may be registered as image transfer destinations.
Of the CL's registered, up to four CL's are switchable as master CL's.
DELETE
NEW
DELETE
>>
CANCEL
MODIFY
SET

FR9H7136.EPS

For more detail about the function that may be set on the "EDIT CL NAME" screen, see "4.3.13 EDIT CL NAME" of the Maintenance Utility volume.

☞ *{MU:4.3.13_EDIT CL NAME}*


DELETE
NEW
DELETE
>>
CANCEL
MODIFY
SET
PC-TOOL HOSTS MODIFY
CL IP ADDRESS
CL NAME
CANCEL
SET

#1 [Click] MODIFY

#2 [Input] CL IP ADDRESS 172 016 001 021

#3 [Input] CL NAME FUJI FILM

#4 [Click] SET

FR9H7077.EPS

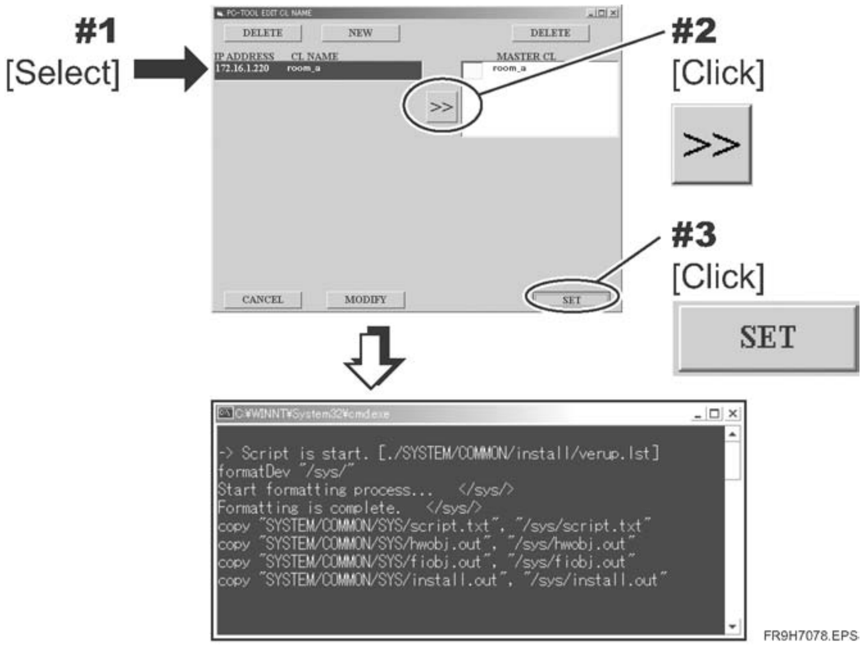
13. Confirm the installation precautions.

⚠ **CAUTIONS**

- ***While data is being written into the FLASH ROM, never turn OFF the power of the RU. If the power of the RU is turned OFF, the program residing in the memory is corrupted, so that the RU cannot be rebooted.***
- ***The post-installation checkout procedure varies with the version of the RU software. Before installation, confirm the version of the RU software that is installed in the flash ROM on the IMG board.***

14. Click on [SET].

- When the version of the RU software installed in the flash ROM on the IMG board is 1.3 or earlier


DELETE
NEW
DELETE
IP ADDRESS
CL NAME
MASTER CL
172.16.1.220
room_a
>>
CANCEL
MODIFY
SET
C:¥WINNT¥System32¥cmd.exe

#1 [Select]

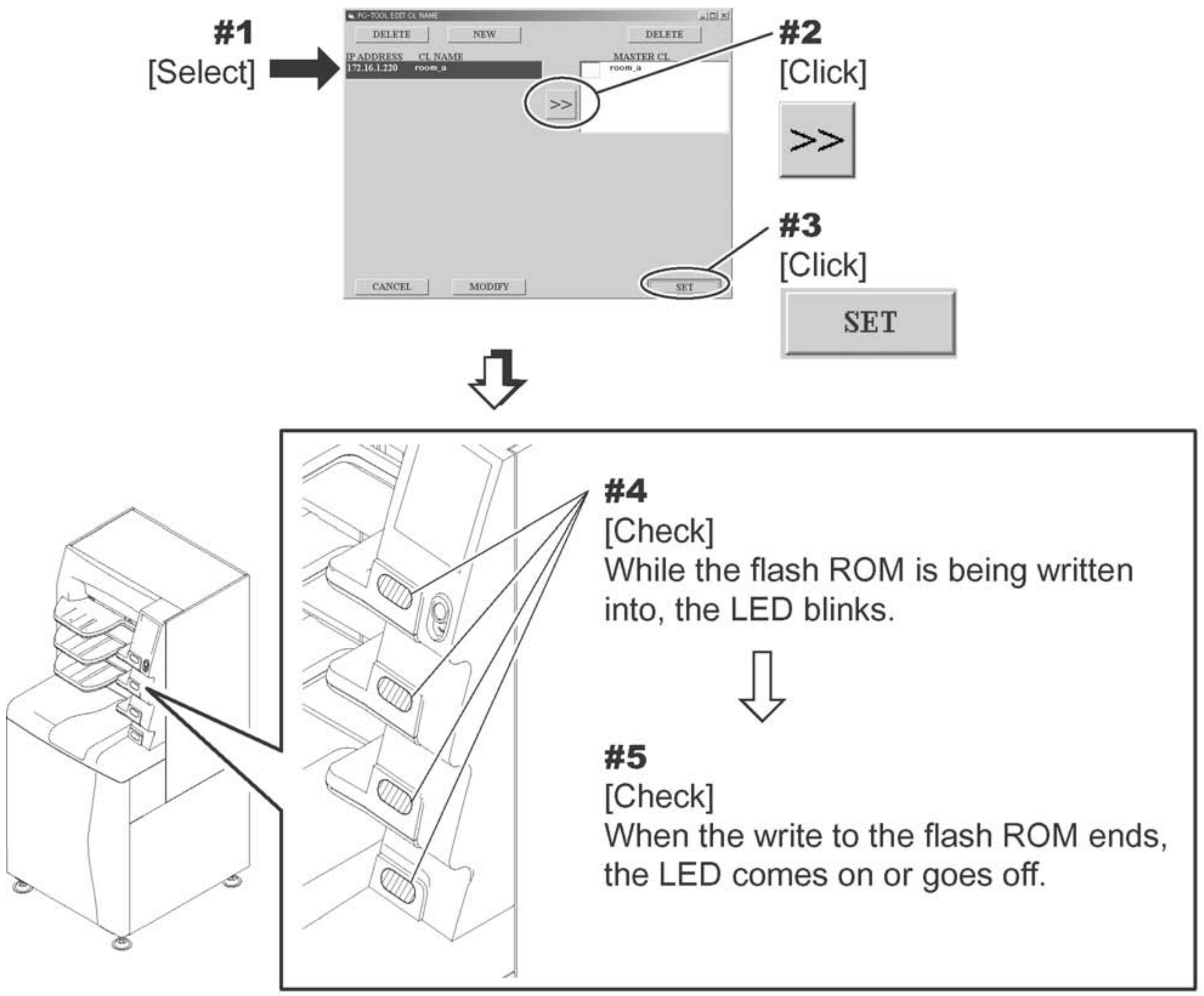
#2 [Click] >>

#3 [Click] SET

```
-> Script is start. [./SYSTEM/COMMON/install/verup.lst]
formatDev "/sys/"
Start formatting process...   </sys/>
Formatting is complete.   </sys/>
copy "SYSTEM/COMMON/SYS/script.txt", "/sys/script.txt"
copy "SYSTEM/COMMON/SYS/hwobj.out", "/sys/hwobj.out"
copy "SYSTEM/COMMON/SYS/fiobj.out", "/sys/fiobj.out"
copy "SYSTEM/COMMON/SYS/install.out", "/sys/install.out"
```

FR9H7078.EPS

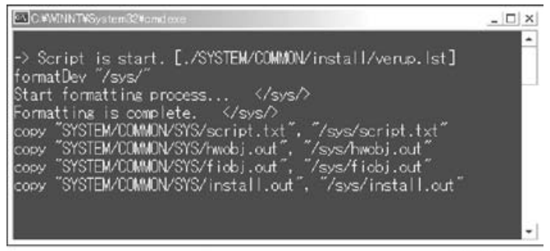
- When the version of the RU software installed in the flash ROM on the IMG board is 1.4 or later


#1
[Select]
PC-TOOL EDIT CL NAME
DELETE
NEW
DELETE
IP ADDRESS
CL NAME
172.16.1.220
room_a
MASTER CL
room_a
>>
CANCEL
MODIFY
SET
#2
[Click]
>>
#3
[Click]
SET
#4
[Check]
While the flash ROM is being written into, the LED blinks.
#5
[Check]
When the write to the flash ROM ends, the LED comes on or goes off.

FR9H7137.EPS

◇ REFERENCE ◇

The installation process screen appears on the CL display.



```
-> Script is start. [./SYSTEM/COMMON/install/verup.lst]
formatDev "/sys/"
Start formatting process...   </sys/>
Formatting is complete.   </sys/>
copy "SYSTEM/COMMON/SYS/script.txt", "/sys/script.txt"
copy "SYSTEM/COMMON/SYS/hwobj.out", "/sys/hwobj.out"
copy "SYSTEM/COMMON/SYS/fiobj.out", "/sys/fiobj.out"
copy "SYSTEM/COMMON/SYS/install.out", "/sys/install.out"
```

FR9H7138.EPS

---

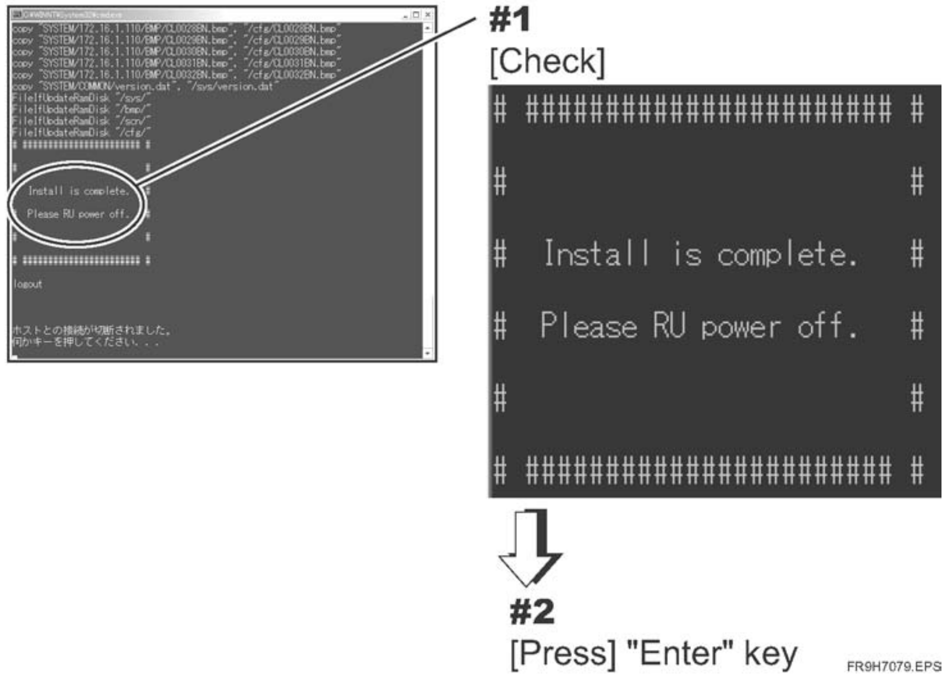
15. Verify that writing into the FLASH ROM has been completed, and press the [Enter] key.

◆ NOTE ◆

The following screen may fail to open due to an application error. If the following screen does not appear on the display, wait about 10 minutes after the click of [OK] in step 14, and then press the [Enter] key.

◇ REFERENCE ◇

Writing into the FLASH ROM will take about four minutes.

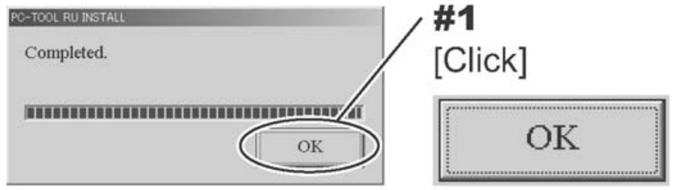


```
copy "SYSTEM/172.16.1.110/BMP/CL0028EN.bmp", "/cfg/CL0028EN.bmp"
copy "SYSTEM/172.16.1.110/BMP/CL0029EN.bmp", "/cfg/CL0029EN.bmp"
copy "SYSTEM/172.16.1.110/BMP/CL0030EN.bmp", "/cfg/CL0030EN.bmp"
copy "SYSTEM/172.16.1.110/BMP/CL0031EN.bmp", "/cfg/CL0031EN.bmp"
copy "SYSTEM/172.16.1.110/BMP/CL0032EN.bmp", "/cfg/CL0032EN.bmp"
copy "SYSTEM/COMMON/version.dat", "/sys/version.dat"
FileIfUpdateRamDisk "/sys/"
FileIfUpdateRamDisk "/bmp/"
FileIfUpdateRamDisk "/scn/"
FileIfUpdateRamDisk "/cfg/"
# ####################### #

#                         #
#  Install is complete.   #
#  Please RU power off.   #
#                         #

# ####################### #

logout


ホストとの接続が切断されました。
何かキーを押してください. . .
```

#1
[Check]
#2
[Press] "Enter" key

FR9H7079.EPS

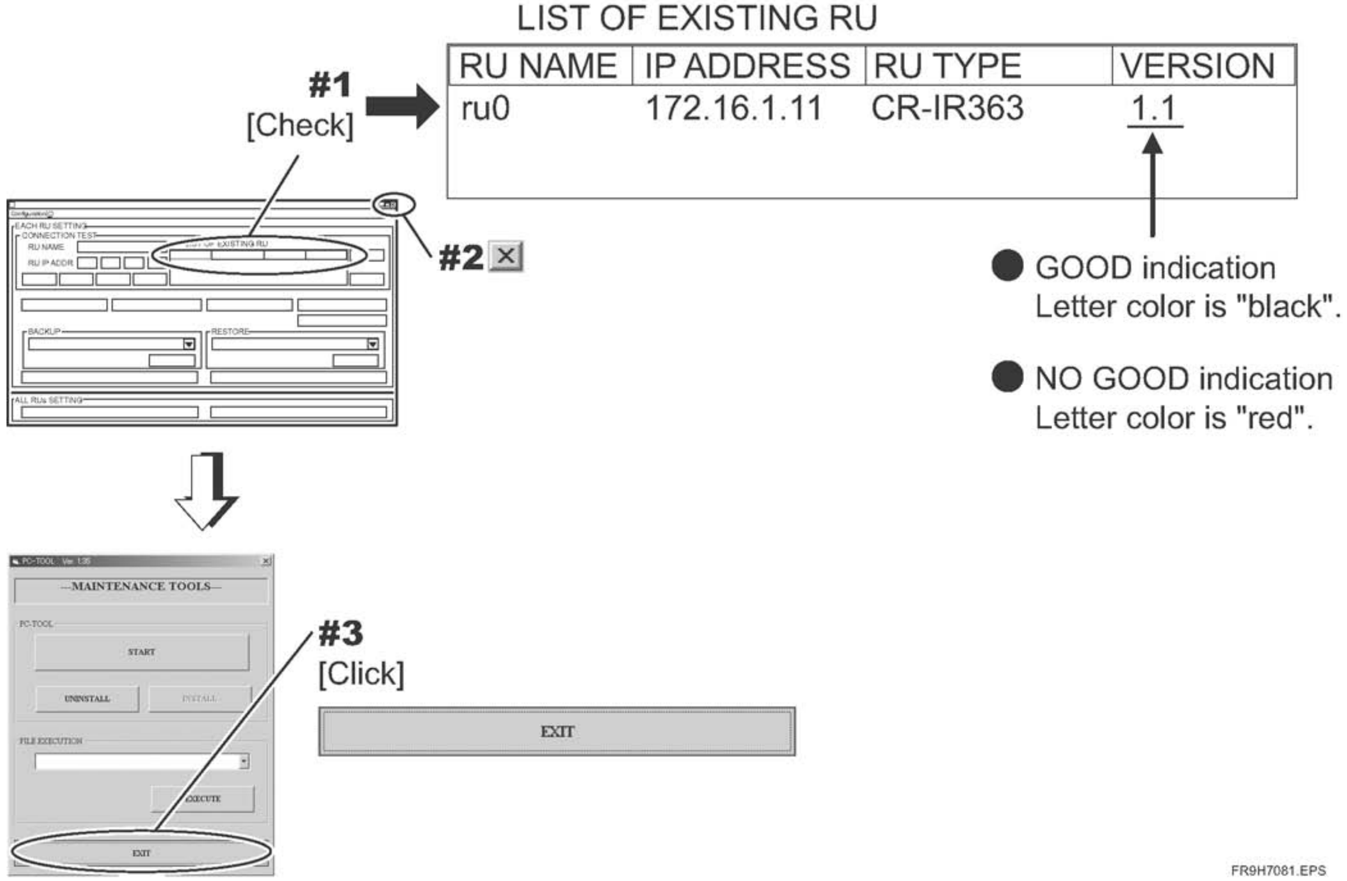
16. Click on [OK].


PC-TOOL RU INSTALL
OK
#1
[Click]
OK

Completed.

FR9H7080.EPS

17. **Check the version of the RU software, and close Setup PC-TOOL.**



LIST OF EXISTING RU

RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.11	CR-IR363	1.1

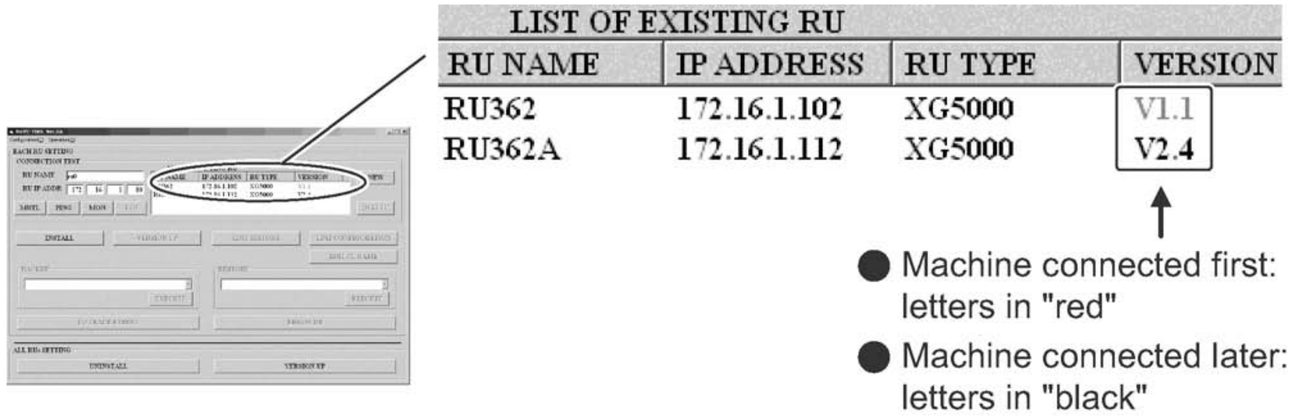
● GOOD indication
Letter color is "black".

● NO GOOD indication
Letter color is "red".

FR9H7081.EPS

◆ *NOTES* ◆

- *In the case of "NO GOOD" indication, return to step 1 and perform install procedures all over again.*
- *When the XG2000 and the XG5000 are connected with a single CL concurrently, the "VERSION" of the RU software appearing on the RU PC-TOOL of the machine first connected appears in red as shown below. Shown below is an example where the XG2000 is first connected, and then the XG5000 is connected. Even if the version appears in red, the machine will normally work.*



LIST OF EXISTING RU

RU NAME	IP ADDRESS	RU TYPE	VERSION
RU362	172.16.1.102	XG5000	V1.1
RU362A	172.16.1.112	XG5000	V2.4

● Machine connected first: letters in "red"

● Machine connected later: letters in "black"

FR9H7143.EPS

- *"RU TYPE" of the XG2000 on the RU PC-TOOL is displayed as "XG5000" or "XG5000/XG2000".*

18. **Turn OFF the power of the RU.**

19. **Turn ON the power of the RU.**

9. Image/Conveyance Checks

In this section, the following checks are made as last-time verification for final placement.

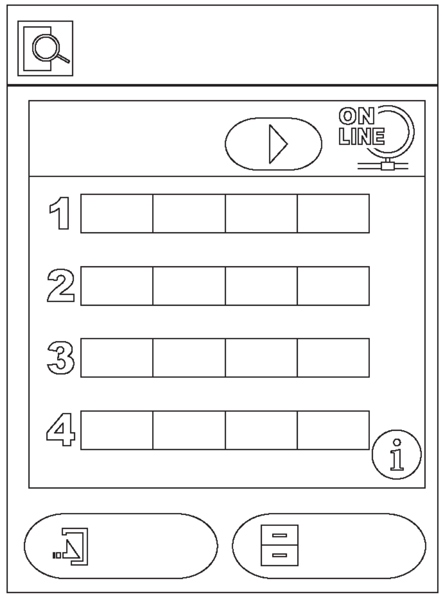
- Conveyance checks
- Image checks

9.1 Check Before Procedures

◆ NOTES ◆

- *For the IP used for image/conveyance checks, an IP of the maximum size used in the hospital should be employed.*
- *Make sure that the IP to be used does not contain any important image data exposed.*

1. Check to ensure that the "READY" screen appears.



FR9H7118.EPS

2. Perform "Secondary Erasure" on the spontaneous radiation and image accumulated on the IP to be used.

☞ {Instruction Manual}

3. Perform IP exposures.

◆ NOTE ◆

Be sure to expose the IP under the following X-ray tube voltage condition. Otherwise, the resulting image could not be checked properly.

For the tungsten X-ray tube: 80 kV
For the molybdenum X-ray tube: 25 kV

◆ INSTRUCTIONS ◆

- *Expose two IPs of maximum sizes for each of the IP types (ST/HR type and HR-BD type) used at the institution, with the following doses.*
- *With the X-ray tube, the first IP should be exposed in a normal orientation, and the second in a 180-degree upside-down orientation.*
- *When the "HR" IP is used in conjunction with the molybdenum X-ray tube, the IP should be exposed under conditions of "● "For "HR-BD" IP."*

● For "ST/HR" IP

- X-ray tube: Tungsten X-ray tube
- Exposure X-ray dose: 1 mR
- Maximum size: IP of 14"x14" (35cm x 35cm) or 14"x17" (35cm x 43cm) size
- Reference conditions: Distance 1.8 m
  Voltage 80 kV
  Amperage 50 mA
  Time 0.013 sec

● For "HR-BD" IP

- X-ray tube: Molybdenum X-ray tube
- Exposure X-ray dose: 20 mR
- Maximum size: IP of 18"x24" HR-BD or 24"x30" HR-BD size
- Reference conditions: Distance 0.55 m
  Voltage 25 kV
  Amperage 100 mA
  Time 0.053 sec

9.2 Image/Conveyance Checks

◆ **NOTE** ◆

Because the "MENU" and so forth differ depending on the IP type, image checks should be performed with the "MENU" specified below.

1. Using menus "TEST", "Image Format" or "Image Format-2", and "SINGLE", record the IP exposed at "9.1 Check Before Procedures", and generate an image output.

◆ **INSTRUCTION** ◆

For IP type HR-BD, when the image menu is to be registered, the HQ flag should be set in the "Exposure Parameter Detail Setting".

2. Check the S value.

◇ REFERENCE ◇

Reference values for S depending on the X-ray dose:

- *For IP type ST (tungsten X-ray tube)*
  - *For 0.1 mR: The S value is 2000.*
  - *For 1 mR: The S value is 200.*
  - *For 10 mR: The S value is 20.*
- *For IP type HR-BD (molybdenum X-ray tube)*
  - *For 2 mR: The S value is 1200.*
  - *For 20 mR: The S value is 120.*
  - *For 200 mR: The S value is 12.*

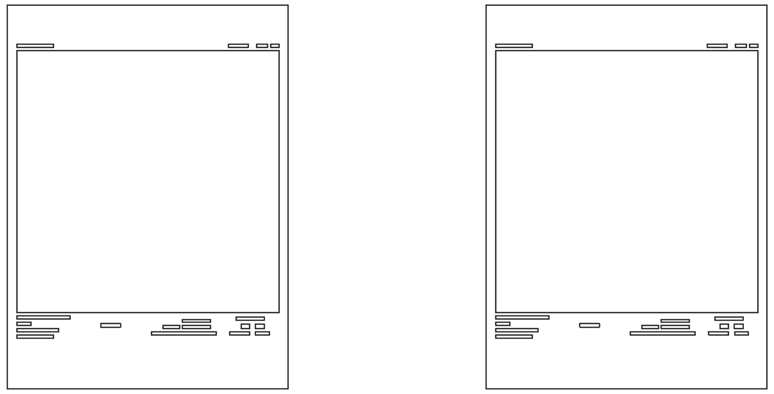
3 Verify that there is no "unusual nonuniformity" found on the output film or on the image displayed on the image monitor.

◆ **CHECK** ◆

There should be no uneven density difference in the main scan direction.

If there is any uneven density difference, compare the films outputted from the two IPs of the same size, and determine whether such nonuniformity is caused by the machine or X-ray tube.

- If there is uneven density difference in the same direction on two films



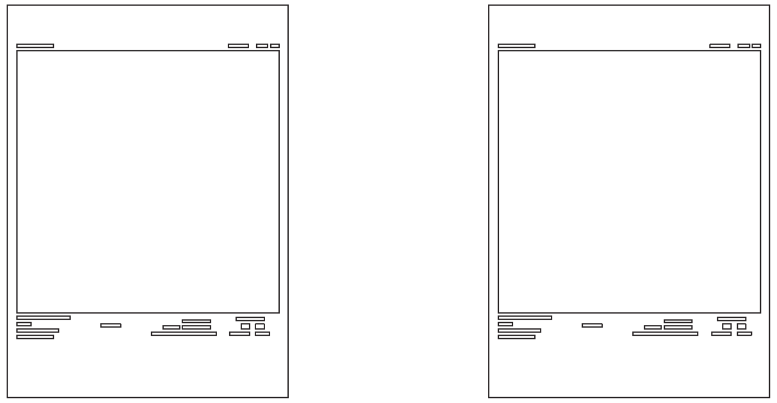
IP in normal orientation (first IP)   IP in 180-degree upside-down orientation (second IP)

FR9H7119.EPS

→ The machine may be the cause of such nonuniformity.

☞ {Troubleshooting}

- If positions of uneven density difference are different



IP in normal orientation (first IP)   IP in 180-degree upside-down orientation (second IP)

FR9H7120.EPS

→ The X-ray tube may be the cause of such nonuniformity.

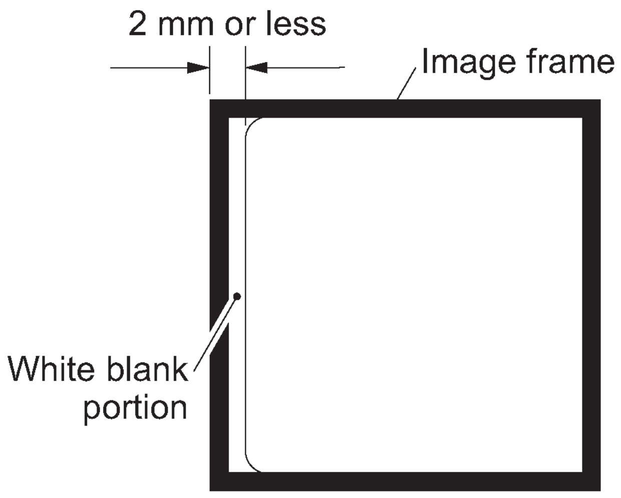
4 **Check the image format.**

Make sure that the white blank portion is 2 mm or less, as actually measured on the IP, from the outermost edge of the image frame of the film outputted.

◆ *CHECK* ◆

The white blank portion should be 2 mm or less.
If anything abnormal is found:

☞ *{Troubleshooting}*



FR9H7121.EPS

◆ *NOTE* ◆

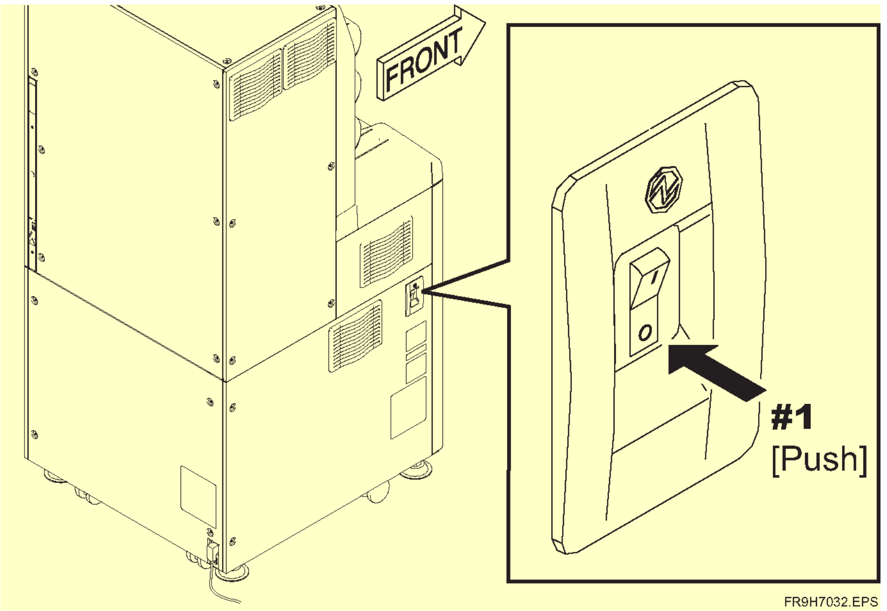
The distance measured on the film may differ from the actual size on the IP, depending on the reading size and film size. The actual size on the IP should be calculated using the distance measured on the film and the reduction factor for the film. Compute the actual size on the IP according to the following equation.

$$\text{Actual size on IP} = \text{Measured value} \times \frac{100}{\text{Reduction factor (\%)}}$$

FR9H7122.EPS

10. Powering OFF the CL/RU

1. Shut down the system of the CL.
2. Shut down the system of the RU.
3. Power OFF the RU.

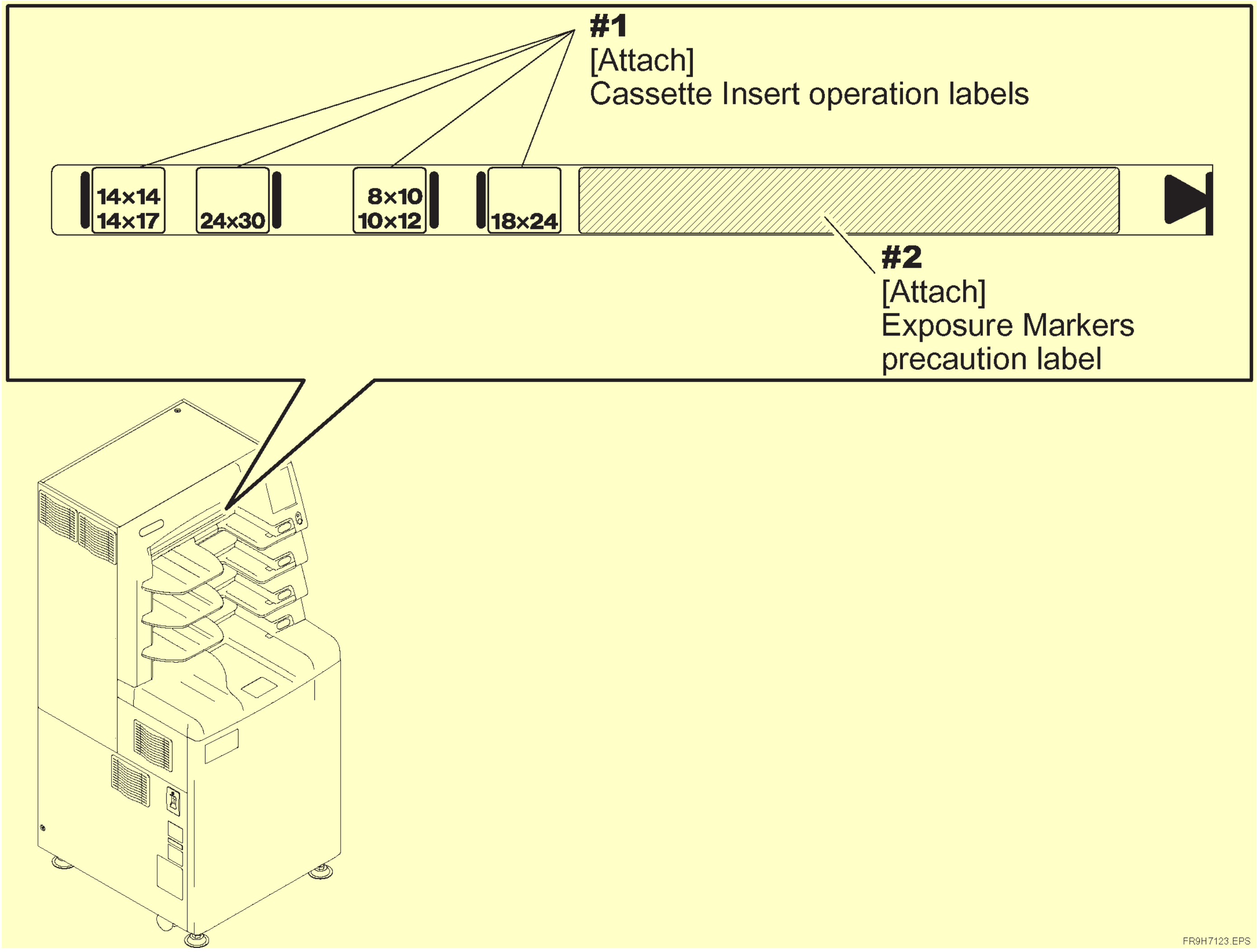

FRONT
#1
[Push]
FR9H7032.EPS

11. Cleaning the CL/RU

1. Clean the monitor and covers of the CL with a dry cloth.
2. Clean the covers of the RU with a moistened cloth.
3. Peel the seal off the touch panel.
4. Attach the Cassette Insert operation labels and the Exposure Markers precaution label.

◆ **NOTE** ◆

Attach the Cassette Insert operation labels for the cassette sizes that are employed by the user.


#1
[Attach]
Cassette Insert operation labels
14×14
14×17
24×30
8×10
10×12
18×24
#2
[Attach]
Exposure Markers precaution label
FR9H7123.EPS

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Appendix 1. Additional Protective Grounding

Additional protective grounding will be required if installing this equipment in the patient environment with the connected equipment in a non-medically used room. Refer to Medical System Standard, IEC60601-1-1.

However, there may be cases where additional protective grounding is not possible. (For example in cases like non-metallic faceplate screws as well as boxes and isolated supply systems etc.) If this should happen, please refer to “Counter-measures for additional protective grounding” on the next page.

This installation work should only be performed by persons certified to handle electrical facility construction.

Definitions of “patient environment”, “medically-used room”, and “non-medically used room” are given below.

● Patient Environment

Patient environment is the area for the patient to receive medical procedures (treatment, tests, diagnosis, monitoring). It is the space measuring 2.5 m in all four directions and 2.5 m in height from the area of the patient’s body.

It excludes the space traveled by the patient to reach the medically-used room.

● Medically-Used Room

Room equipped with protective grounding (medical use outlet or medical use grounding terminal) implemented by the medical grounding method. The protective grounding inside the medically-used room is equipotential, and the protective grounding of this medically-used room is equipotential to that in the other medically-used room.

Generally, a portion of the medically-used room is the patient environment.

● Non-Medically Used Room

Areas outside the medically-used room are considered the non-medically used room.

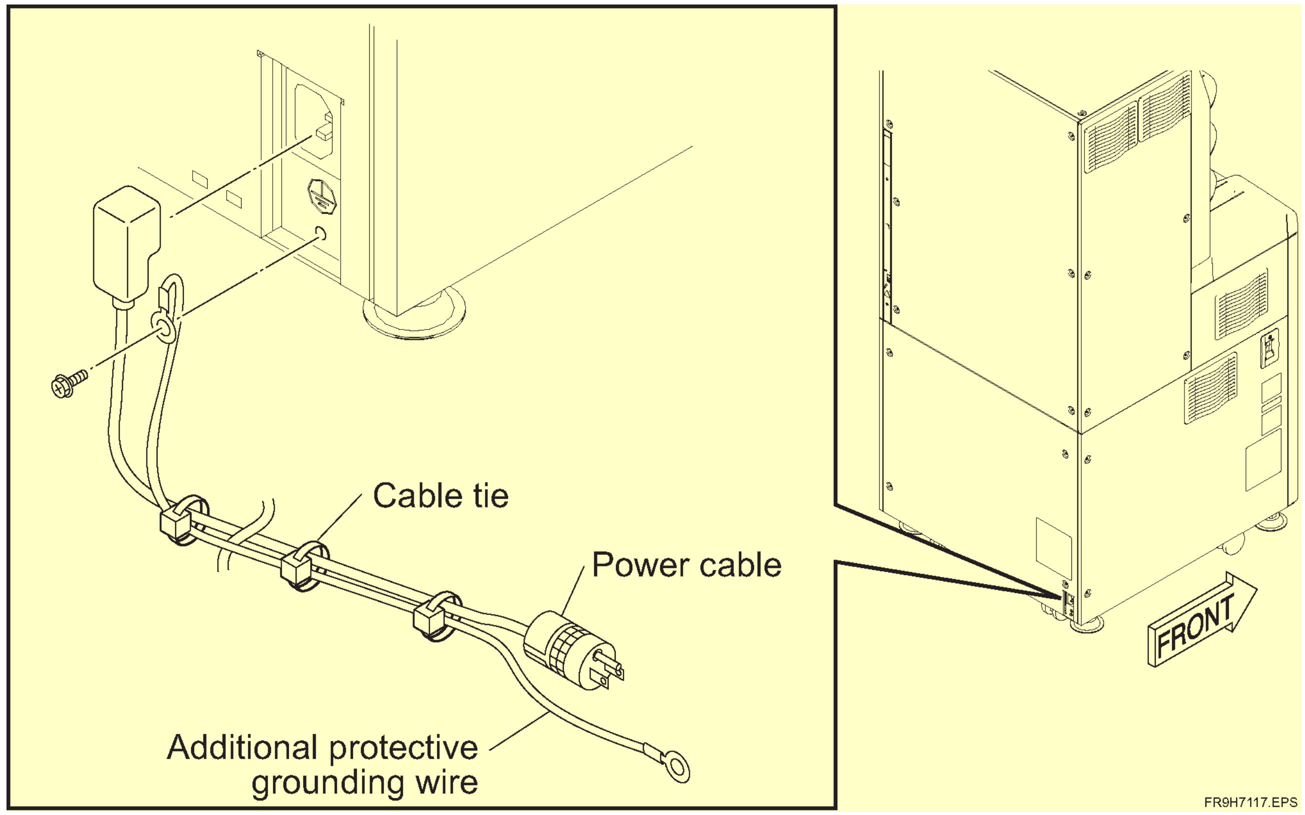
■ Connection Locations of Cables for Additional Protective Grounding of the Equipment and Clamp Locations

<INSTRUCTIONS>

Please use power supply cord and clamp (which is required for keeping the additional protective ground cord in position) approved by the electrical standard of the country to which the equipment is to be installed.

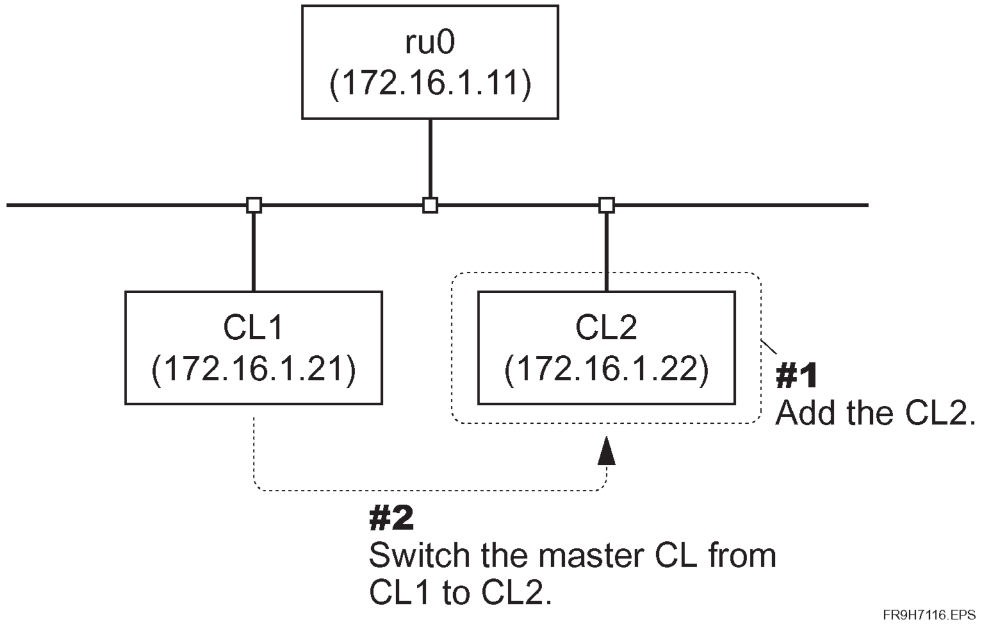
<Counter-measures for additional protective grounding>

1. *Engage the services of a professional to make the necessary preparations for the connection of additional protective grounding.*
2. *If the connected device possess a hospital grade earth terminal and is mobile, move the connected device and replace with a power supply plug which has hospital grade earth terminal.*
3. *Install a isolating transformer to the connected device. In this way, the power supply from the connected device will be separated from the main power supply.*



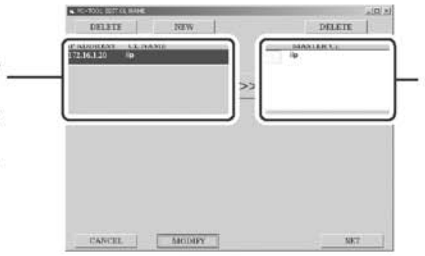
Appendix 2. Setting the Master CL

This section describes the procedures for additionally register the CL2 (172.16.1.22) into the system that consists of the RU (ru0: 172.16.1.11) and CL (master CL: 172.16.1.21), and for switching the master CL from CL1 to CL2.


ru0
(172.16.1.11)
CL1
(172.16.1.21)
CL2
(172.16.1.22)
#1
Add the CL2.
#2
Switch the master CL from CL1 to CL2.
FR9H7116.EPS

◇ REFERENCE ◇

Up to 32 CL's may be registered as image transfer destinations. Of the CL's registered, up to four CL's are switchable as master CL's.



Up to 32 CL's may be registered as image transfer destinations.

Of the CL's registered, up to four CL's are switchable as master CL's.

FR9H7136.EPS

For more detail about the function that may be set on the "EDIT CL NAME" screen, see "4.3.13 EDIT CL NAME" of the Maintenance Utility volume.

☞ *{MU:4.1.13_EDIT CL NAME}*

1. Additionally Registering the Master CL (Procedures on the CL1)

1. **Turn ON the power of the CL.**

2. **Turn ON the power of the RU.**

3. **Place the RU in the Maintenance Mode.**

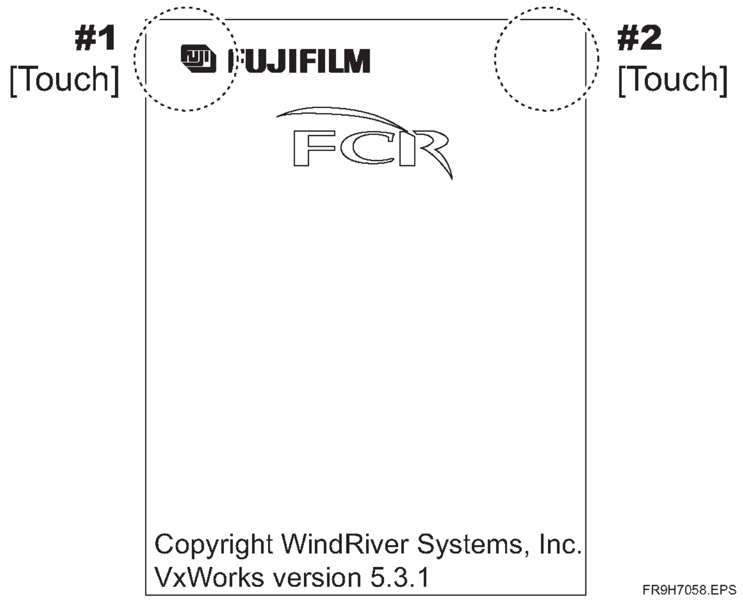
After the main screen appears, sequentially touch the upper left and upper right corners of the touch panel.

◆ ***NOTE*** ◆

Because the IP address of the FTP server has not been set yet, it takes about three minutes until the main screen appears.

◇ REFERENCE ◇

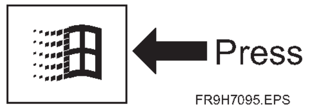
If your touch is accepted by the panel, a "beep" alarm sound is generated.


#1
[Touch]
#2
[Touch]
FUJIFILM
FCR
Copyright WindRiver Systems, Inc.
VxWorks version 5.3.1
FR9H7058.EPS

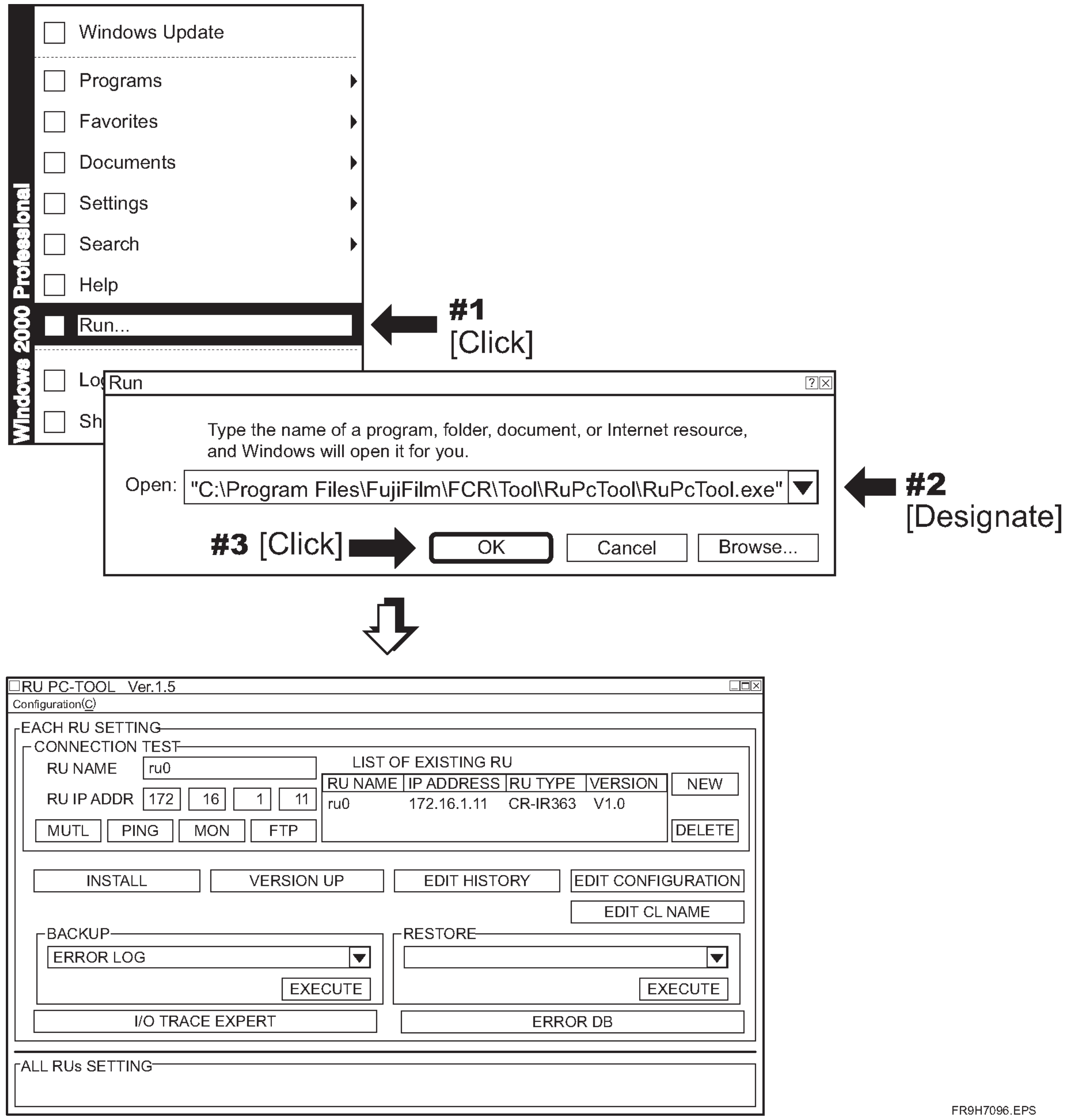
◆ ***INSTRUCTION*** ◆

If you cannot put the RU into the Maintenance Mode, turn OFF the power of the RU and then reboot the RU all over again.

4. **Press the [Windows] key to display the Start menu of Windows.**


Press
FR9H7095.EPS

5. **Select [Run...] from the Start menu of Windows. When the dialog opens, type ["C:\Program Files\FujiFilm\FCR\TOOL\RuPcTool\RuPcTool.exe"] and click on the [OK] button.**


Windows 2000 Professional
Windows Update
Programs
Favorites
Documents
Settings
Search
Help
Run...
Lo
Sh
#1
[Click]
Run
#2
[Designate]
#3 [Click]
OK
Cancel
Browse...
RU PC-TOOL Ver.1.5
Configuration(C)
EACH RU SETTING
CONNECTION TEST
MUTL
PING
MON
FTP
NEW
DELETE
INSTALL
VERSION UP
EDIT HISTORY
EDIT CONFIGURATION
EDIT CL NAME
BACKUP
RESTORE
EXECUTE
EXECUTE
I/O TRACE EXPERT
ERROR DB
ALL RUs SETTING
FR9H7096.EPS

Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open: "C:\Program Files\FujiFilm\FCR\Tool\RuPcTool\RuPcTool.exe"

RU NAME: ru0

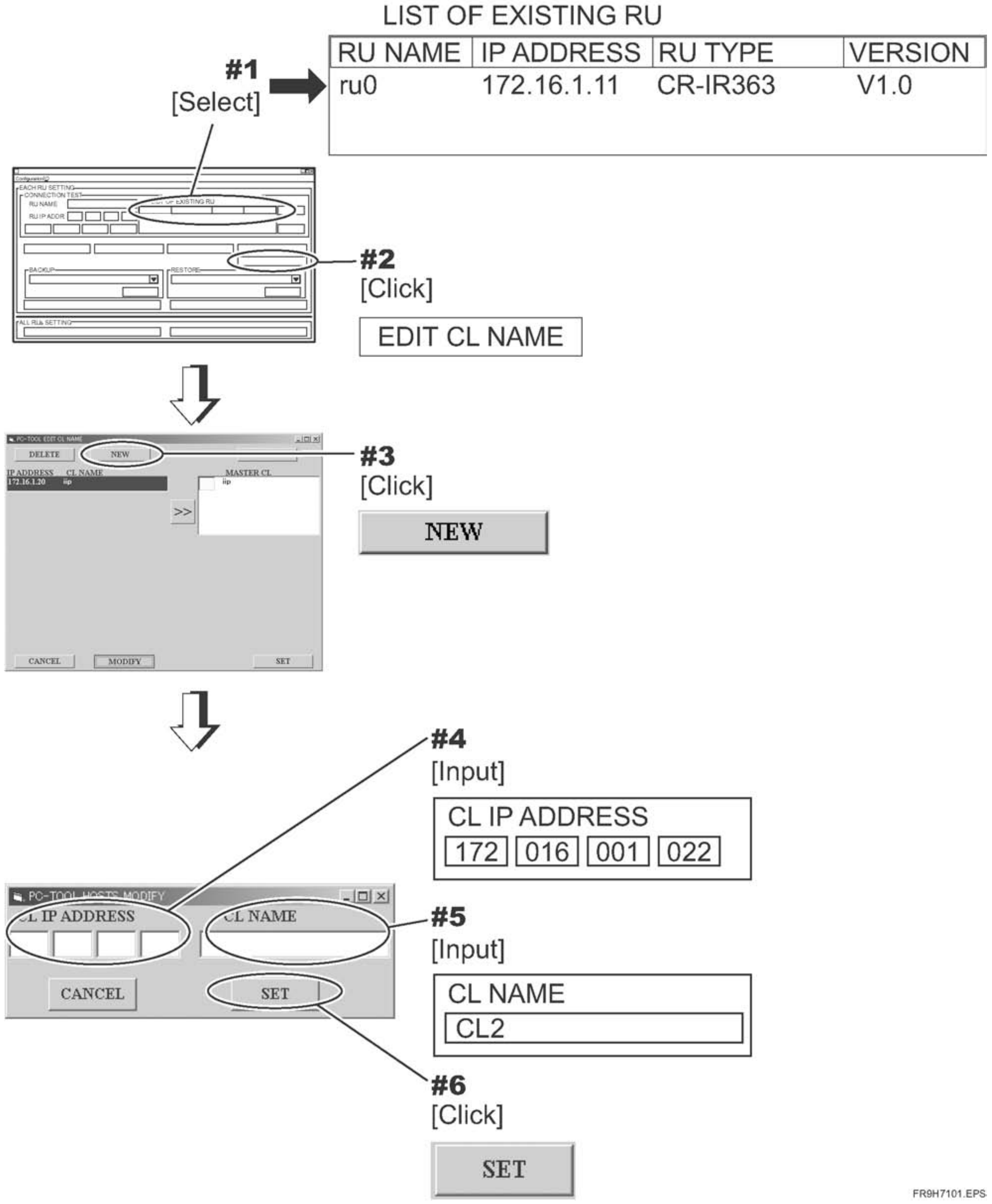
RU IP ADDR: 172 16 1 11

LIST OF EXISTING RU

RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.11	CR-IR363	V1.0

BACKUP: ERROR LOG

6. **From "LIST OF EXISTING RU", select a RU where the master CL is to be added, and enter the "IP ADDRESS" and "CL NAME" of the master CL to be added.**


#1
[Select]
#2
[Click]
EDIT CL NAME
#3
[Click]
NEW
DELETE
MASTER CL
>>
CANCEL
MODIFY
SET
PC-TOOL HOSTS MODIFY
#4
[Input]
#5
[Input]
CANCEL
SET
#6
[Click]
SET
FR9H7101.EPS

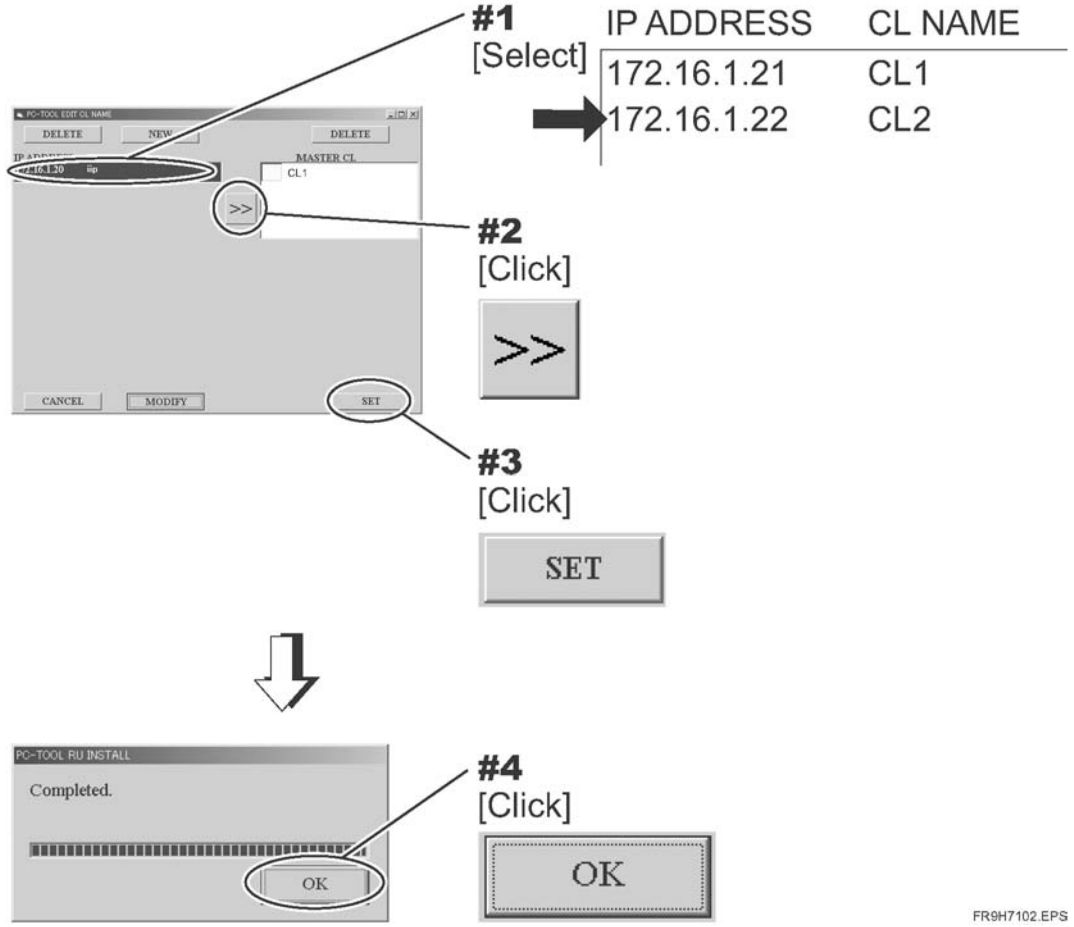
LIST OF EXISTING RU

RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.11	CR-IR363	V1.0

CL IP ADDRESS: 172 016 001 022

CL NAME: CL2

7. **Register the master CL (CL2) created at step 6 into the Master CL.**


#1
[Select]
PC-TOOL EDIT CL NAME
DELETE
NEW
DELETE
MASTER CL
CL1
>>
#2
[Click]
>>
CANCEL
MODIFY
SET
#3
[Click]
SET
PC-TOOL RU INSTALL
OK
#4
[Click]
OK
FR9H7102.EPS

IP ADDRESS	CL NAME
172.16.1.21	CL1
172.16.1.22	CL2

Completed.

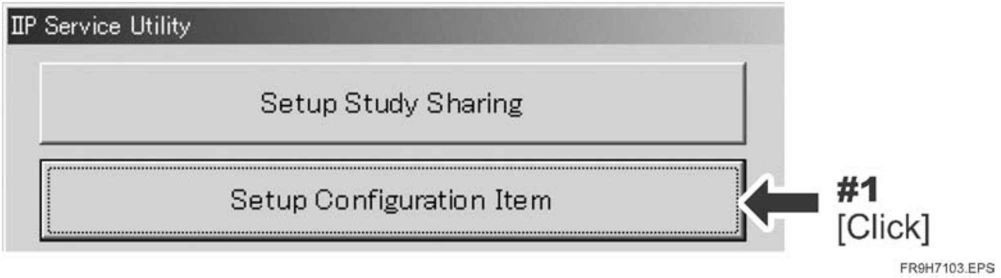
8. **Close the RU PC-TOOL window.**

2. Registering the RU (Procedures on the CL2)

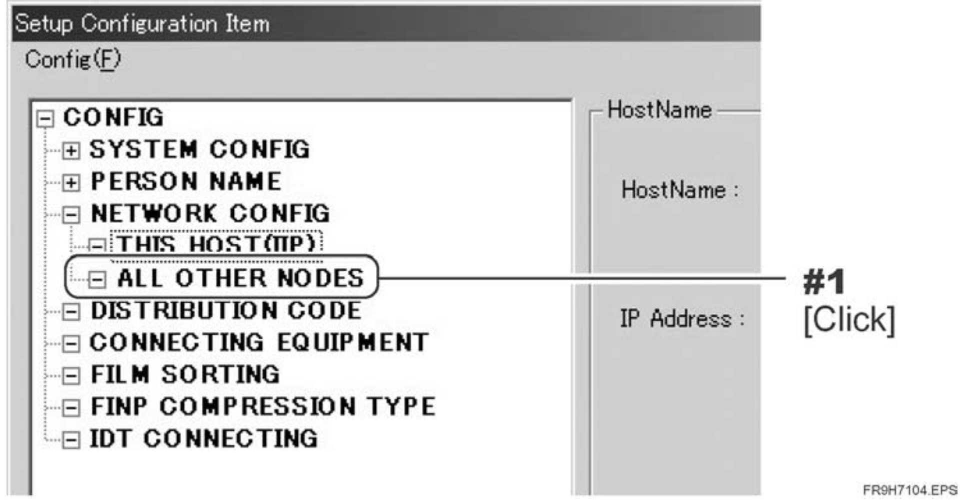
1. **Start the Service Utility.**

☞ {FCR XG-1/CR CL Service Manual/Maintenance Utility (MU)/1. Starting and Exiting the Service Utility}

2. **Click on [Setup Configuration Item].**

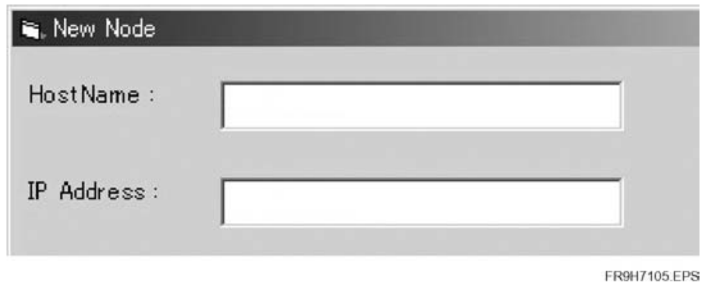

IIP Service Utility
Setup Study Sharing
Setup Configuration Item
#1
[Click]
FR9H7103.EPS

3. **Click on [ALL OTHER NODES] of [NETWORK CONFIG].**


Setup Configuration Item
Config(F)
CONFIG
SYSTEM CONFIG
PERSON NAME
NETWORK CONFIG
THIS HOST(IIP)
ALL OTHER NODES
DISTRIBUTION CODE
CONNECTING EQUIPMENT
FILM SORTING
FINP COMPRESSION TYPE
IDT CONNECTING
HostName
HostName :
IP Address :
#1
[Click]
FR9H7104.EPS

4. **Click on** New **.**

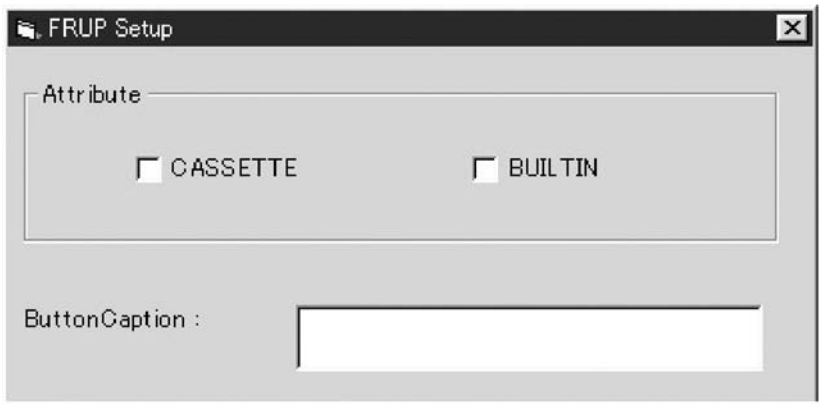
→ The "New Node" dialog box appears.


New Node
HostName :
IP Address :
FR9H7105.EPS

5. **Enter the host name (ru0) of the RU in HostName : [ ] and its IP address (172.16.1.11) in IP Address : [ ].**

6. **Select ● FRUP in the "Add Node" field, and click on OK.**

   → The "FRUP Setup" screen appears.


FRUP Setup
Attribute
☐ CASSETTE
☐ BUILTIN
ButtonCaption :

FR9H7106.EPS

7. **Check ☑ CASSETTE in the "Attribute" field (☐ → ☑).**

8. **Type "ru0" in ButtonCaption : [ ].**

   ◇ *REFERENCE* ◇

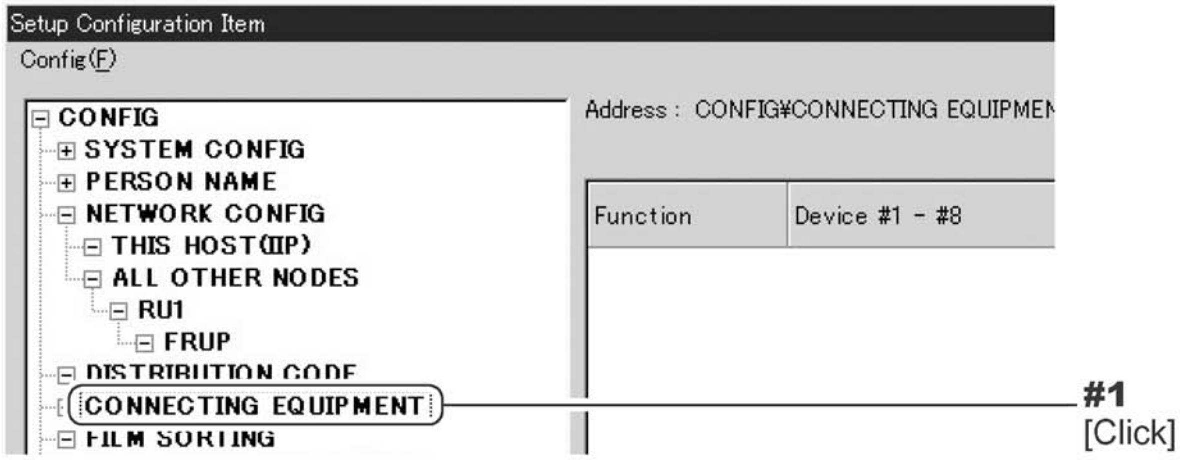
   The name should not necessarily be the same as the host name.

9. **Click on OK.**

   → Registering the network information is now completed.

3. Registering the Machine Information (CONNECTING EQUIPMENT)

1. **Click on [CONNECTING EQUIPMENT] in the "Setup Configuration Item" window.**

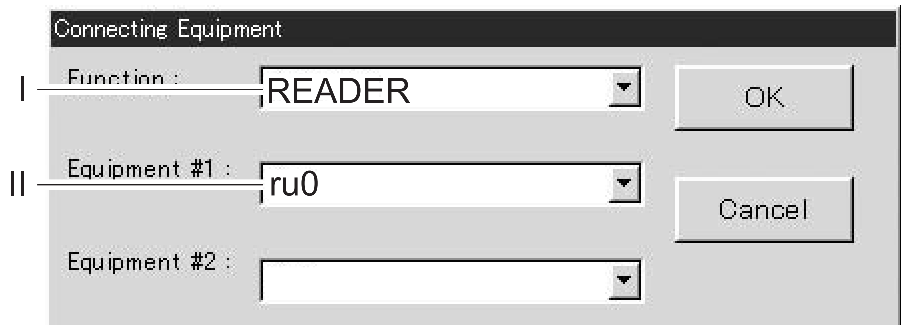

Setup Configuration Item
Config(F)
Address : CONFIG¥CONNECTING EQUIPMEN
CONFIG
SYSTEM CONFIG
PERSON NAME
NETWORK CONFIG
THIS HOST(IP)
ALL OTHER NODES
RU1
FRUP
DISTRIBUTION CODE
CONNECTING EQUIPMENT
FILM SORTING
Function
Device #1 - #8
#1
[Click]

FR9H7107.EPS

2. **Click on New.**

   → The "Connecting Equipment" dialog box appears.

3. **Register the machine information as shown below.**


Connecting Equipment
I
II
OK
Cancel

Function : READER

Equipment #1 : ru0

Equipment #2 :

FR9H7108.EPS

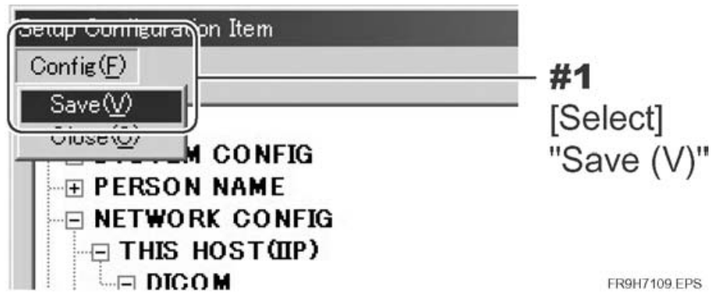
   I. Select "Reader".
   II. Select the host name (e.g., ru0).
   III. If several RU's are connected, select the second and subsequent host name(s) in "Equipment #2" and so on.

4. **Click on OK.**

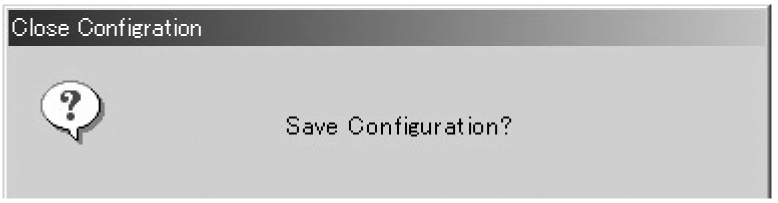
   → Registering the machine information is now completed.
   The "Setup Configuration Item" window appears back on screen.

4. Saving Configuration and Exiting Service Utility

1. **From the "Config (F)" menu in the "Setup Configuration Item" window, select "Save (V)".**


Setup Configuration Item
Config(F)
Save(V)
Close(C)
SYSTEM CONFIG
PERSON NAME
NETWORK CONFIG
THIS HOST(IP)
DICOM
#1
[Select]
"Save (V)"
FR9H7109.EPS

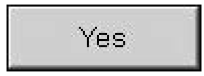
→ The save confirmation window appears.



Close Configration

Save Configuration?

FR9H7110.EPS

2. **Click on**  **.**

→ The setup is saved.

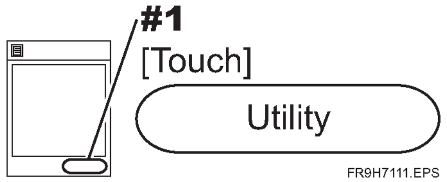
3. **From the "Config (F)" menu, select "Close (C)".**

→ The "Service Utility" window appears back on screen.

4. **Exit the Service Utility.**

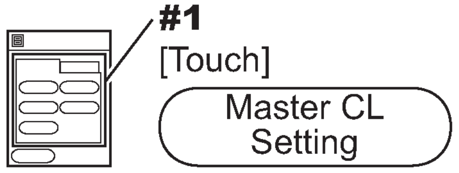
5. Verifying Switching of Master CL

1. **Turn OFF the power of the RU.**
2. **Turn ON the power of the RU.**
3. **Touch the [Utility] button.**


#1
[Touch]
Utility

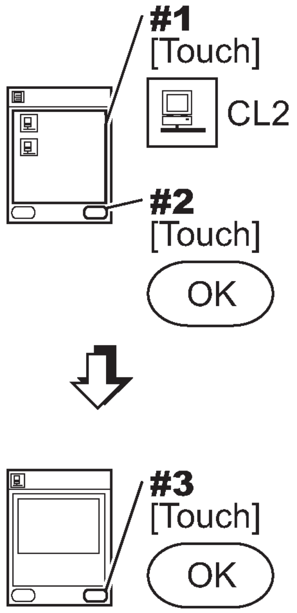
FR9H7111.EPS

4. **Touch the [Master CL Setting] button on the [1/2] tag.**


#1
[Touch]
Master CL Setting

FR9H7112.EPS

5. **Touch the icon of CL2, and hit the [OK] button.**


#1
[Touch]
CL2
#2
[Touch]
OK
#3
[Touch]
OK

FR9H7113.EPS

◇ *REFERENCE* ◇

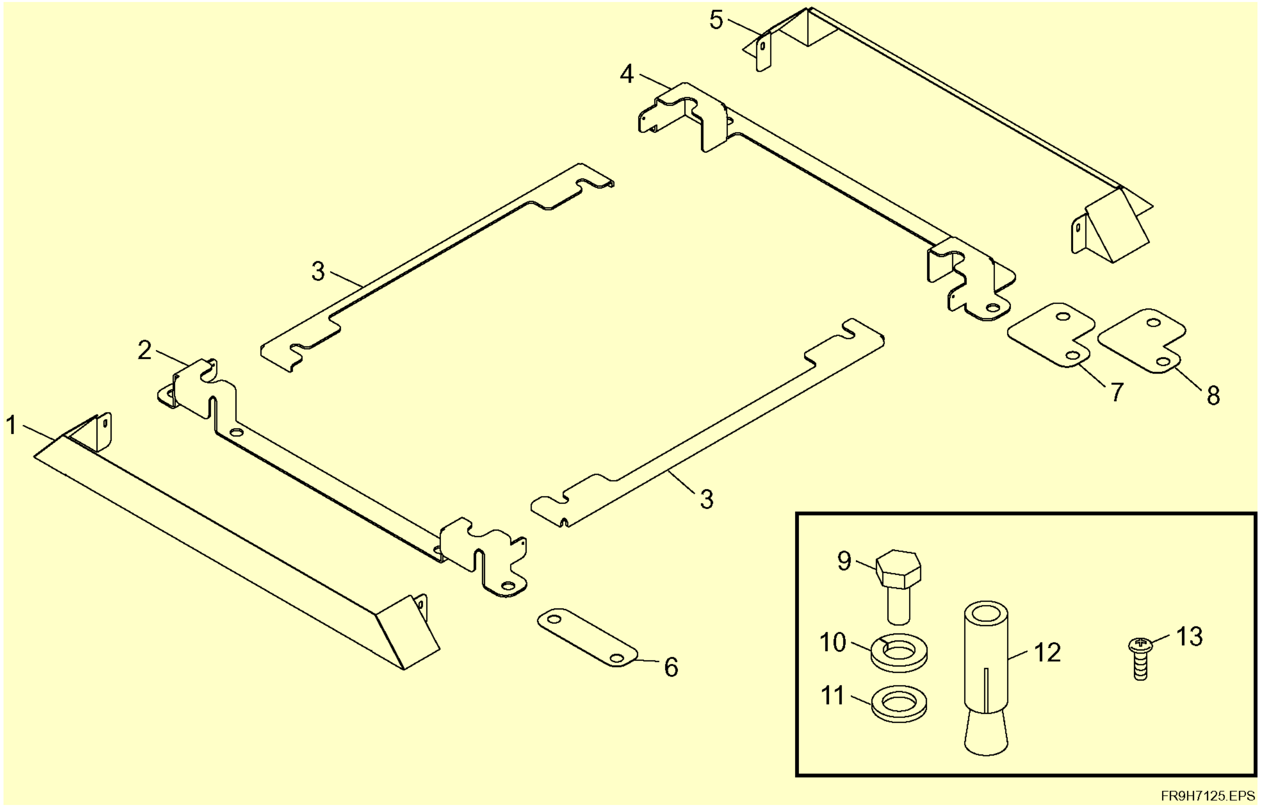
The power of the RU automatically turns OFF about 1 minute after the master CL is set.

6. **Turn ON the power of the RU.**
7. **Perform reading, and make sure that the image is transferred to the master CL.**

Appendix 3. Securing the Machine with the Anti-Topple Retainers

The procedures described herein are applicable when the RU is secured down onto the floor by use of the anti-topple retainers.

1. Components of Anti-Topple Retainer Kit



No.	Name	Qty.	Remarks
1	Cover (front)	1	350N2873
2	Bracket (front)	1	356N9407
3	Bracket	2	356N9406A
4	Bracket (rear)	1	356N9534
5	Cover (rear)	1	350N2874A
6	Spacer (2 mm)	12	347N1930
7	Spacer (1 mm)	2	347N1929
8	Spacer (2 mm)	12	347N1928
9	Hex head socket bolt (12x20)	8	304S1001225
10	Spring washer (SW12)	8	309S0220012
11	Plain washer (W12)	8	309S0120012
12	Anchor nut (Na12)	8	305S0061
13	Truss screw (T3x6)	4	301S3000408

2. Securing the Machine with the Anti-Topple Retainers

◆ **NOTE** ◆

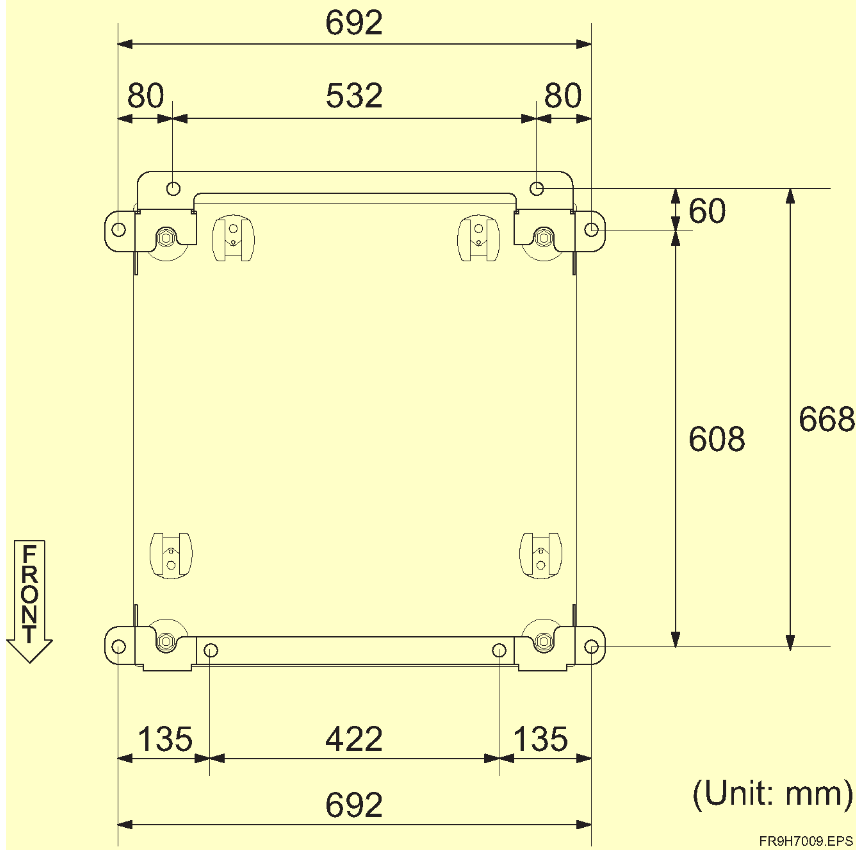
Before drilling holes for embedding the anchor nuts, wear protective goggles.

◇ *REFERENCE* ◇

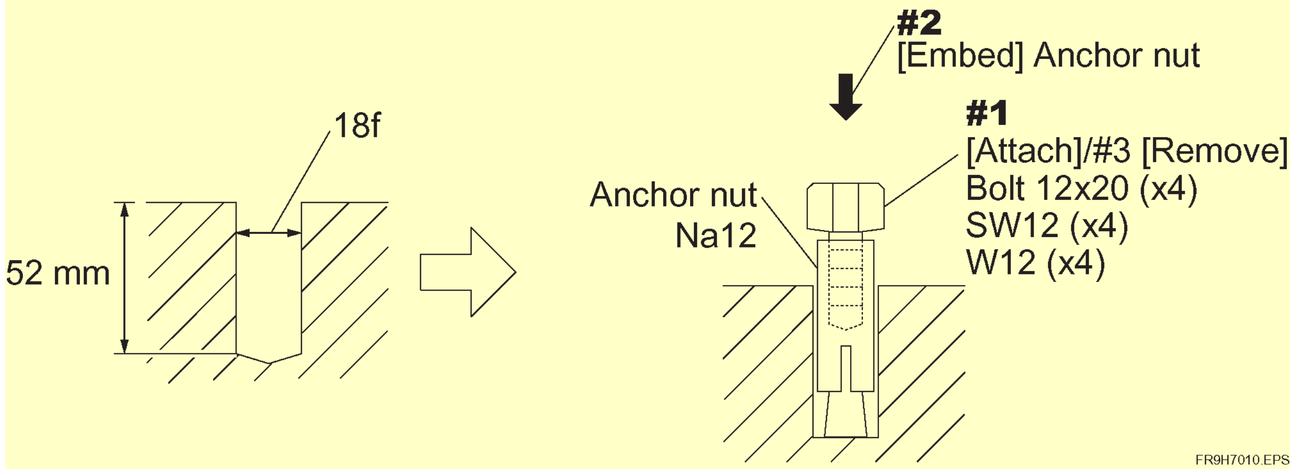
When determining the locations for embedding the anchor nuts, temporarily install the machine and retainers in place, and then mark the locations.

1. Determine the locations for embedding the anchor nuts.

<Reference values>


692
80
532
80
60
608
668
FRONT
135
422
135
692
(Unit: mm)
FR9H7009.EPS

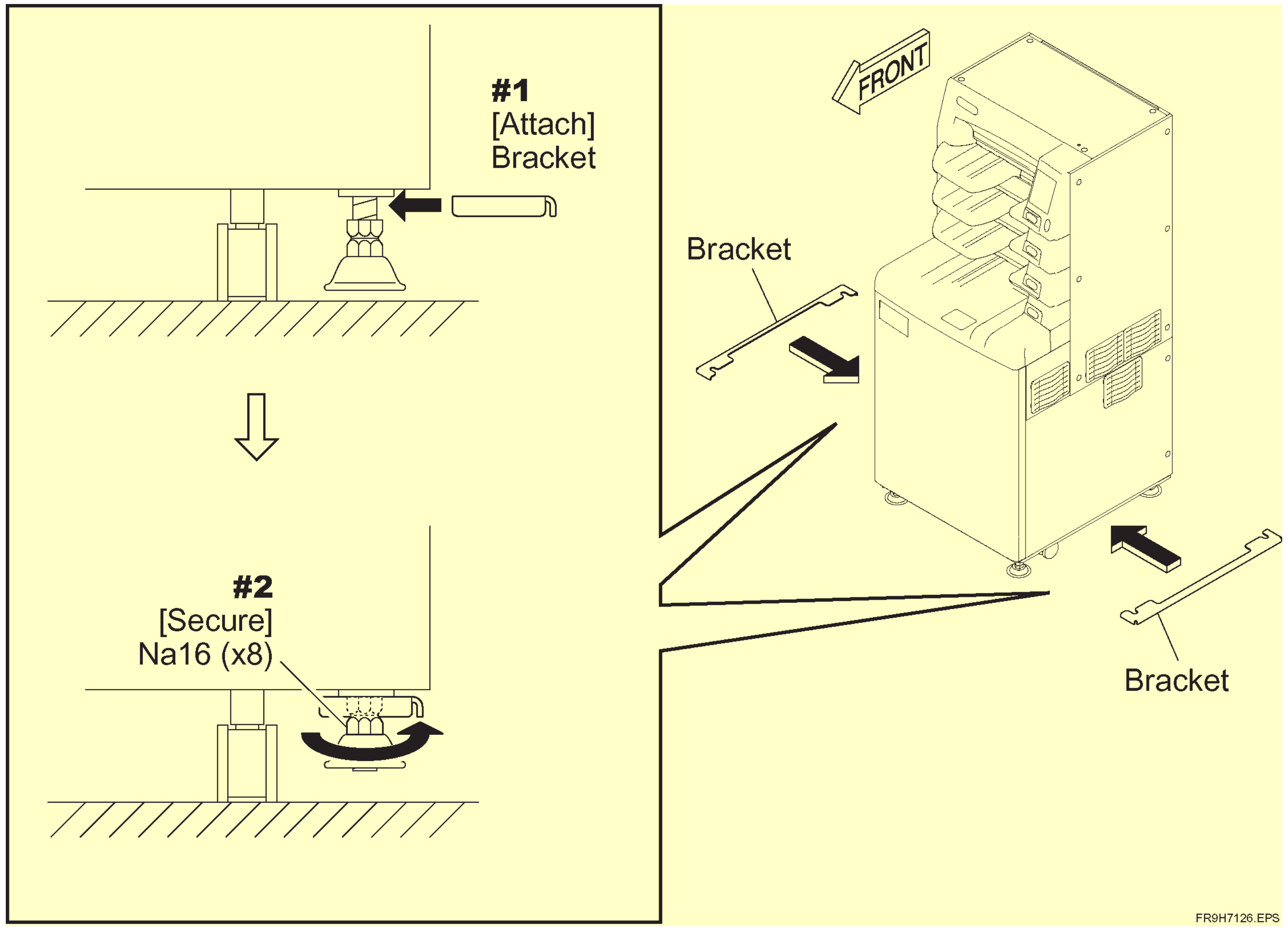
2. Drill holes for embedding the anchor nuts and then embed the anchor nuts.


#2
[Embed] Anchor nut
18f
#1
[Attach]/#3 [Remove]
Bolt 12x20 (x4)
SW12 (x4)
W12 (x4)
Anchor nut
Na12
52 mm
FR9H7010.EPS

3. Attach the brackets to the machine.

◇ *REFERENCE* ◇

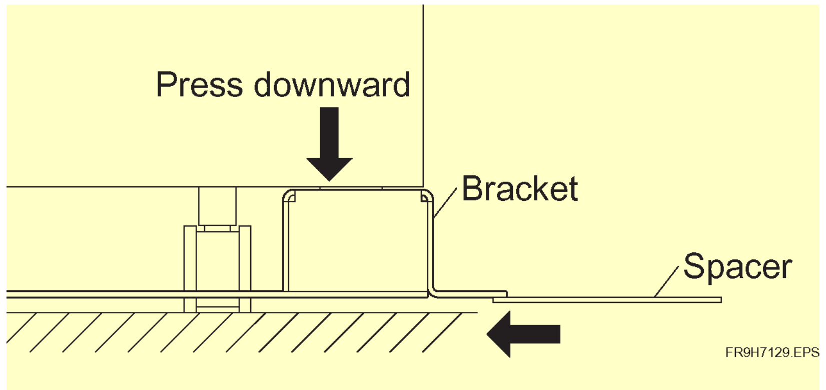
The brackets to be attached to the right and left sides of the machine are identical in shape.


#1
[Attach]
Bracket
#2
[Secure]
Na16 (x8)
FRONT
Bracket
Bracket
FR9H7126.EPS

4. **Move the machine to the location where it is to be secured, and then attach the bracket to the rear side of the machine and insert 2mm-thick spacers.**

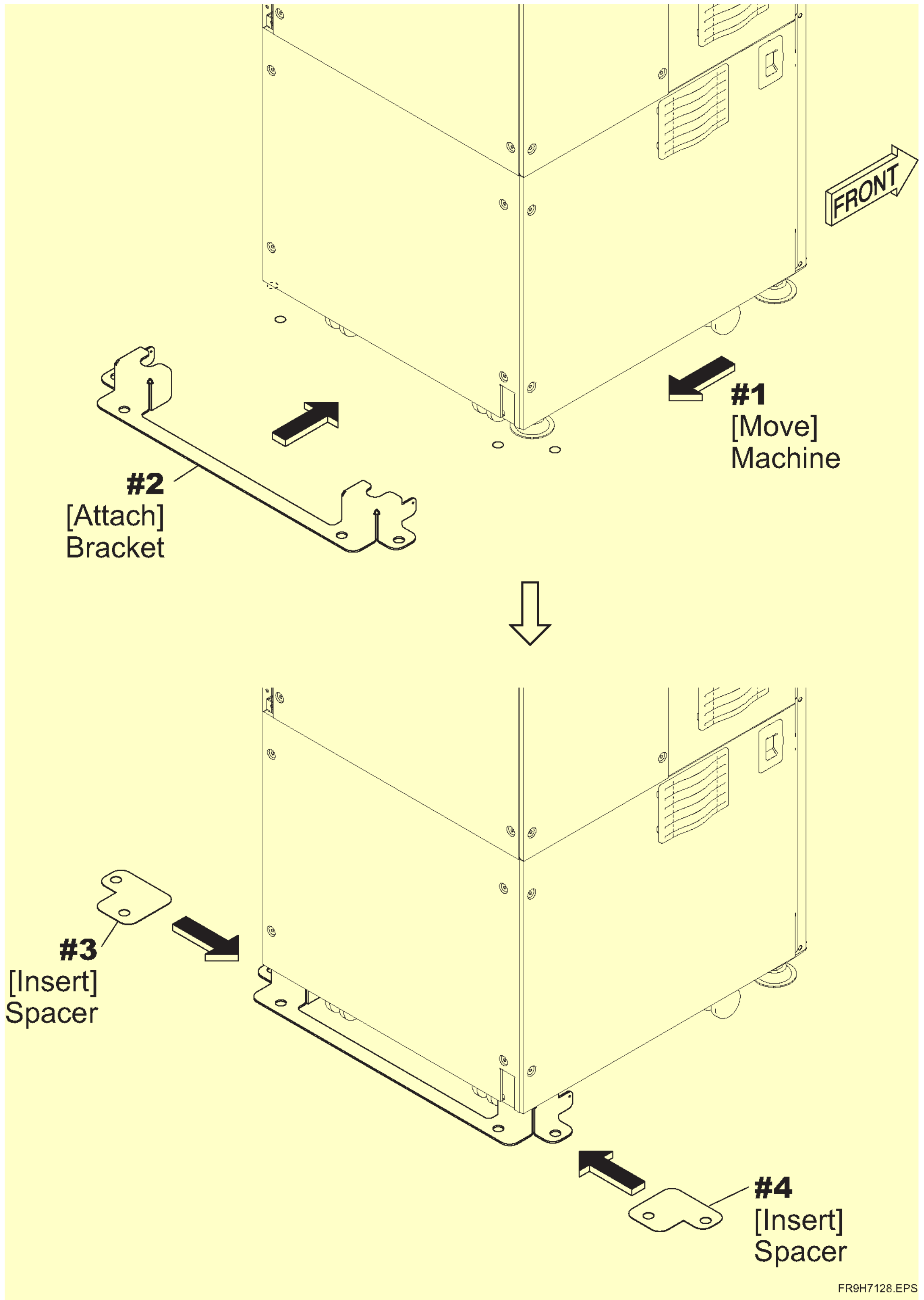
◆ *NOTE* ◆

While pressing the bracket downward, insert 2mm-thick spacers.

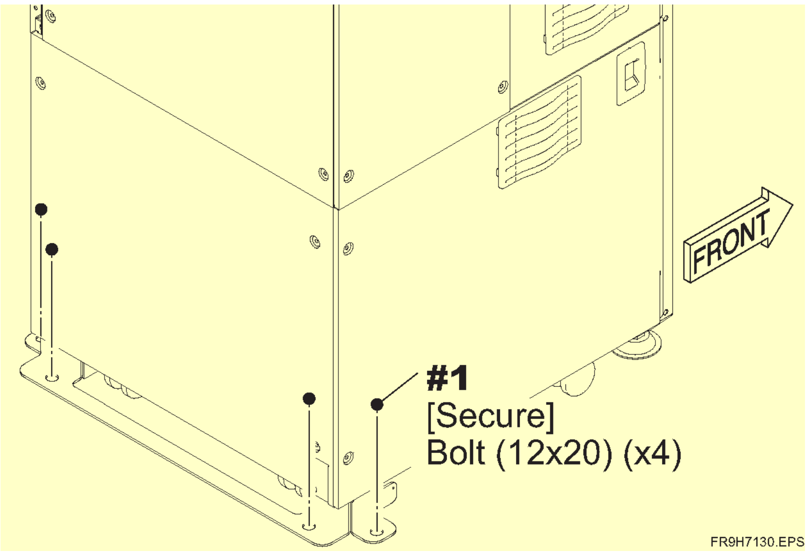

Press downward
Bracket
Spacer
FR9H7129.EPS

◆ *INSTRUCTION* ◆

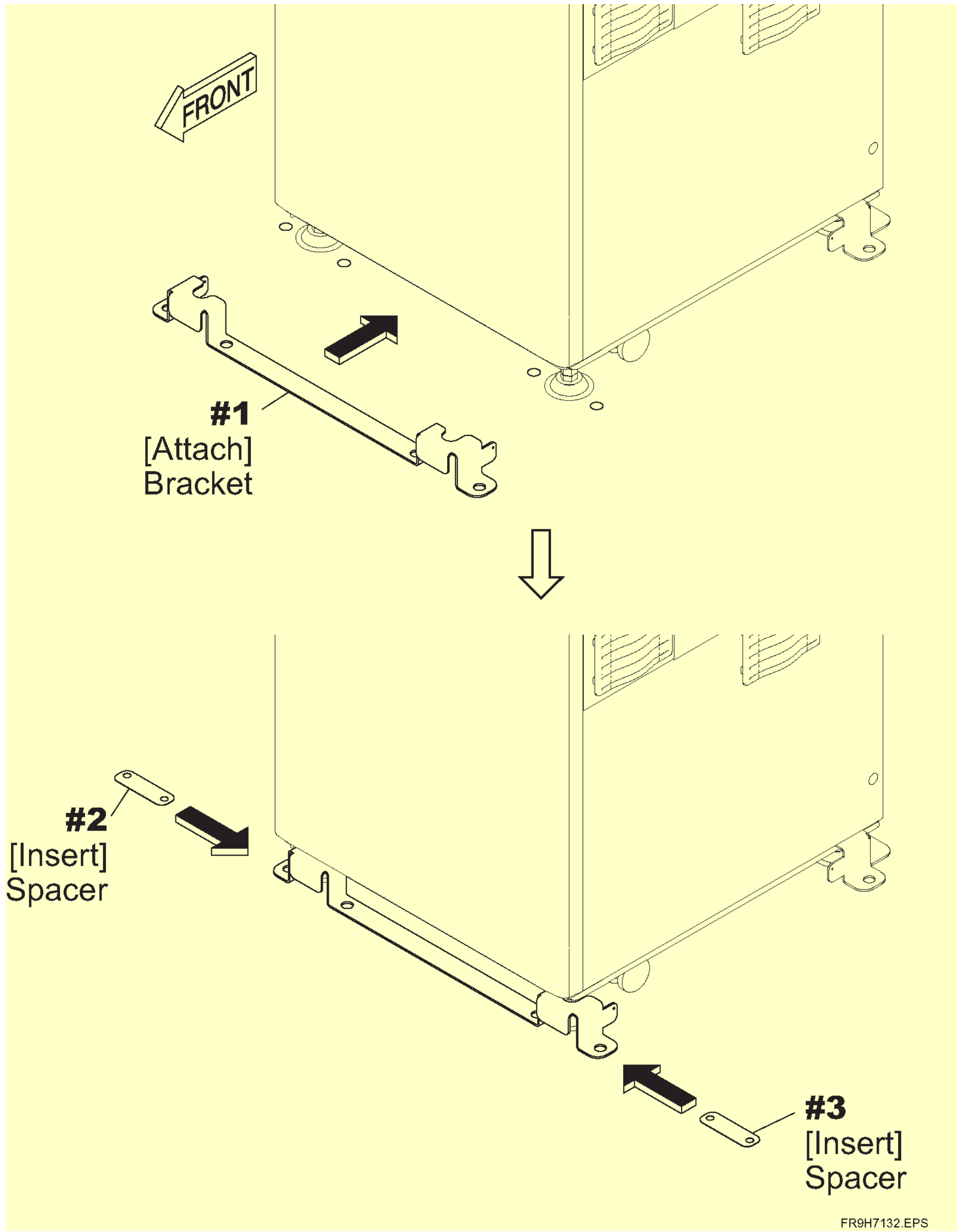
Insert 2mm-thick spacers until a 1mm-thick spacer is no longer inserted.


FRONT
#1
[Move]
Machine
#2
[Attach]
Bracket
#3
[Insert]
Spacer
#4
[Insert]
Spacer
FR9H7128.EPS

5. **Secure the brackets by bolts.**

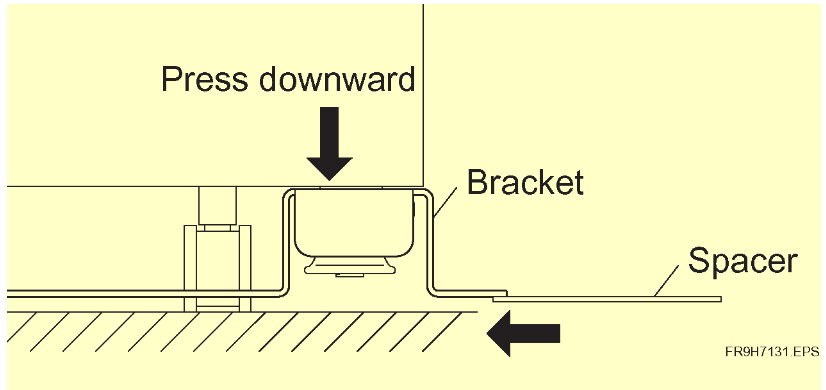

FRONT
#1
[Secure]
Bolt (12x20) (x4)
FR9H7130.EPS

6. **Attach the bracket to the front side of the machine, and insert 2mm-thick spacers.**


FRONT
#1
[Attach]
Bracket
#2
[Insert]
Spacer
#3
[Insert]
Spacer
FR9H7132.EPS

◆ NOTE ◆

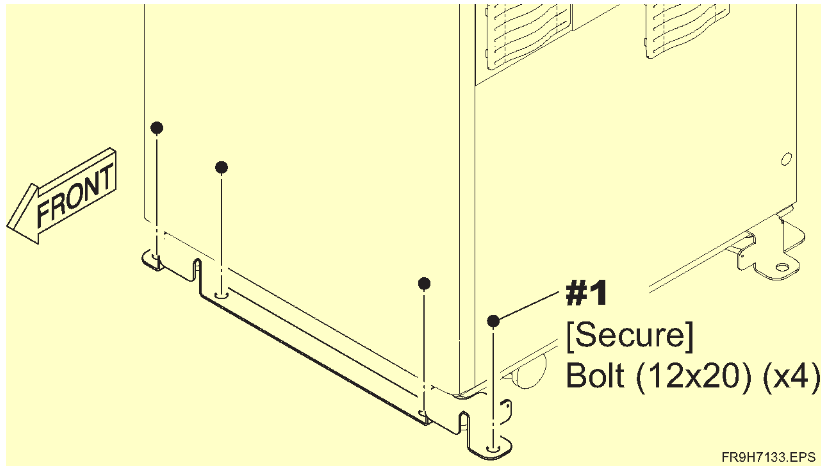
While pressing the bracket downward, insert 2mm-thick spacers.


Press downward
Bracket
Spacer
FR9H7131.EPS

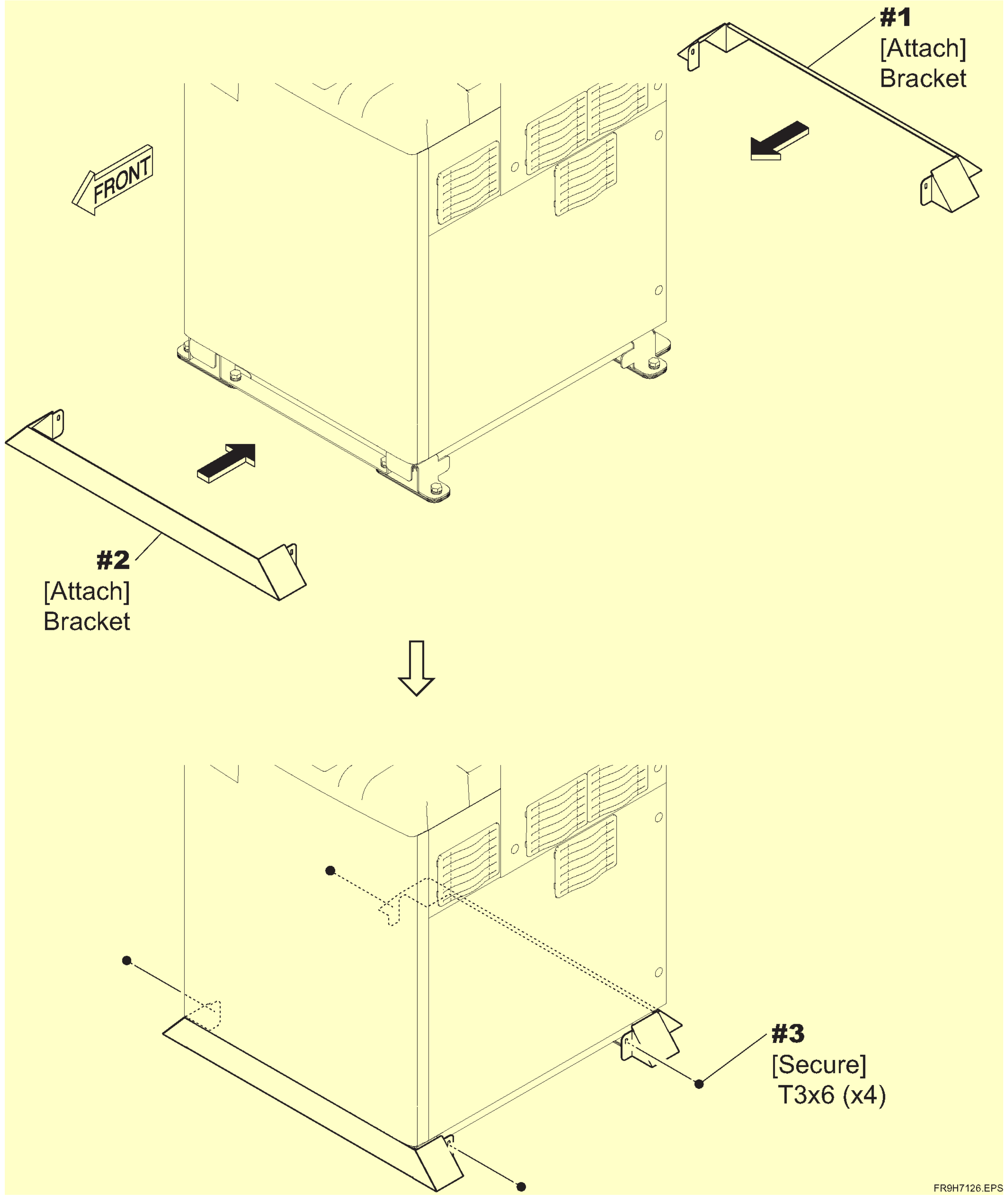
◆ INSTRUCTION ◆

Insert 2mm-thick spacers until a 2mm-thick spacer is no longer inserted.

7. Secure the bracket by bolts.


FRONT
#1
[Secure]
Bolt (12x20) (x4)
FR9H7133.EPS

8. Attach the cover brackets.

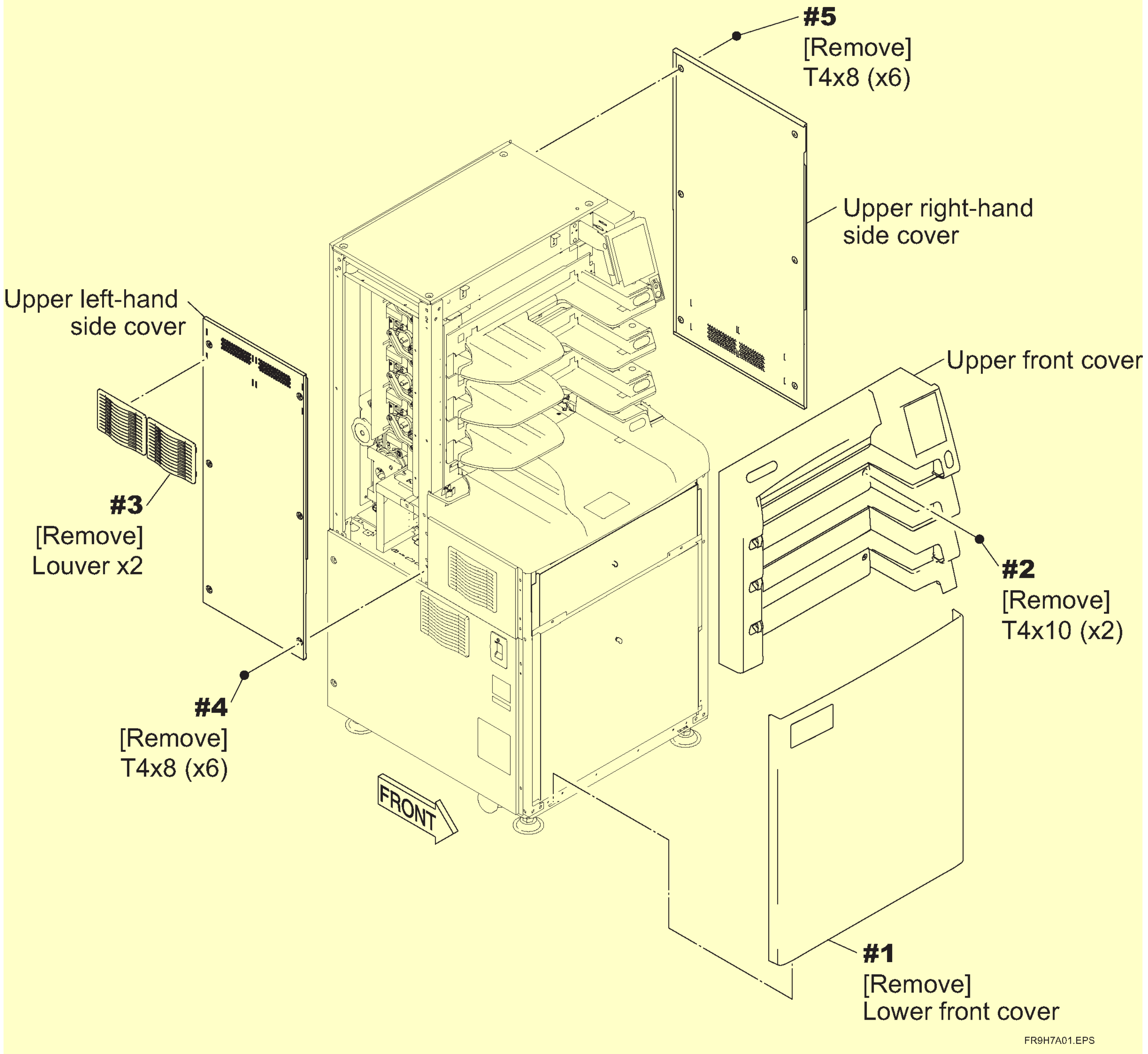

#1
[Attach]
Bracket
FRONT
#2
[Attach]
Bracket
#3
[Secure]
T3x6 (x4)
FR9H7126.EPS

Appendix 4. Setting the Both-Side Cassette Identification Barcode Reader

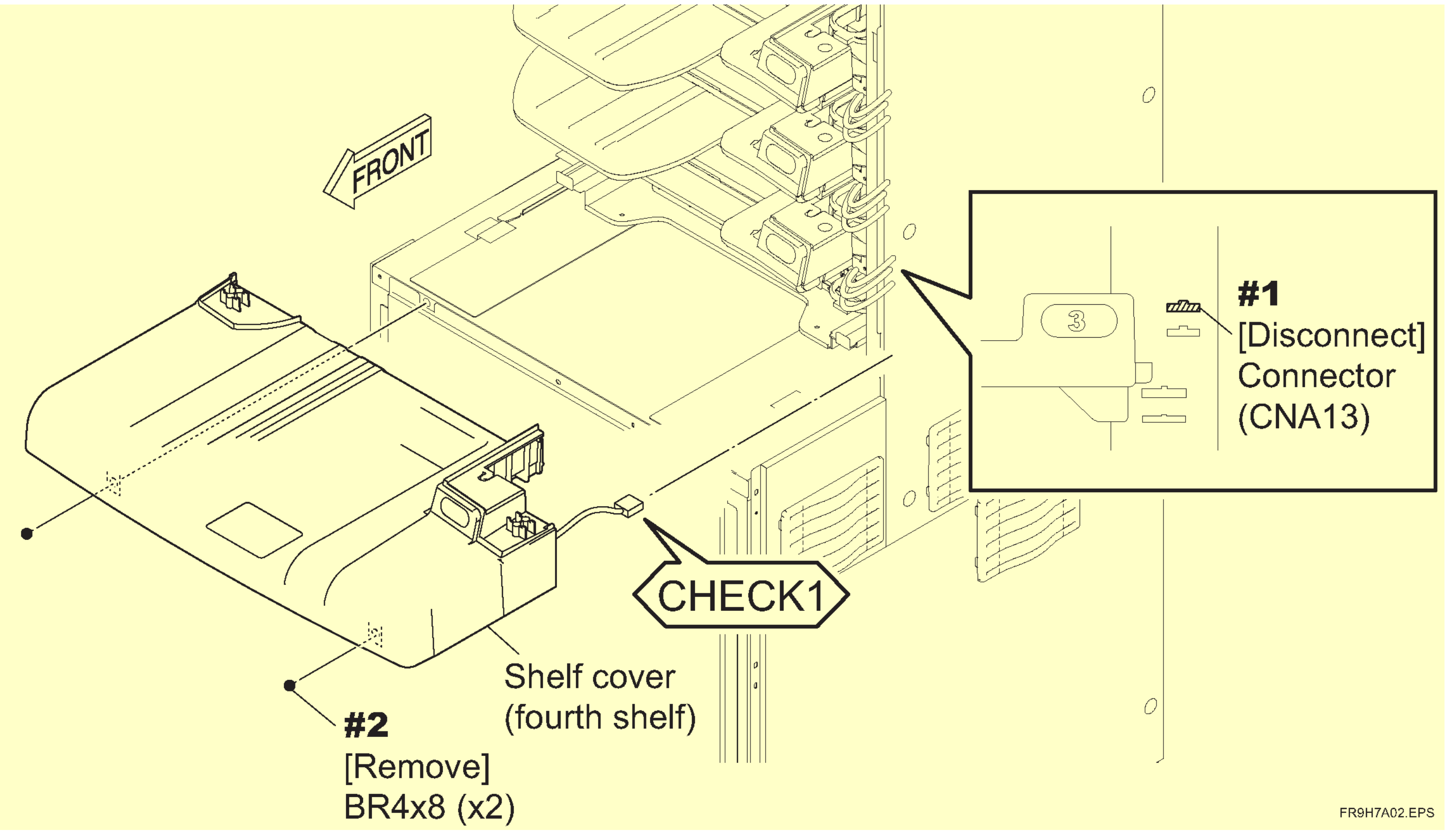
The following setting should be made when the both-side cassette identification barcode reader (for preventing wrong insertion of both-side cassette) is to be used with the CR-IR362.

1. Installing the Barcode Reader

1. Remove the covers.


#5
[Remove]
T4x8 (x6)
Upper right-hand
side cover
Upper left-hand
side cover
Upper front cover
#3
[Remove]
Louver x2
#2
[Remove]
T4x10 (x2)
#4
[Remove]
T4x8 (x6)
FRONT
#1
[Remove]
Lower front cover
FR9H7A01.EPS

2. Remove the shelf cover (for the fourth shelf).


FRONT
#1
[Disconnect]
Connector
(CNA13)
3
CHECK1
Shelf cover
(fourth shelf)
#2
[Remove]
BR4x8 (x2)
FR9H7A02.EPS

- CHECK 1

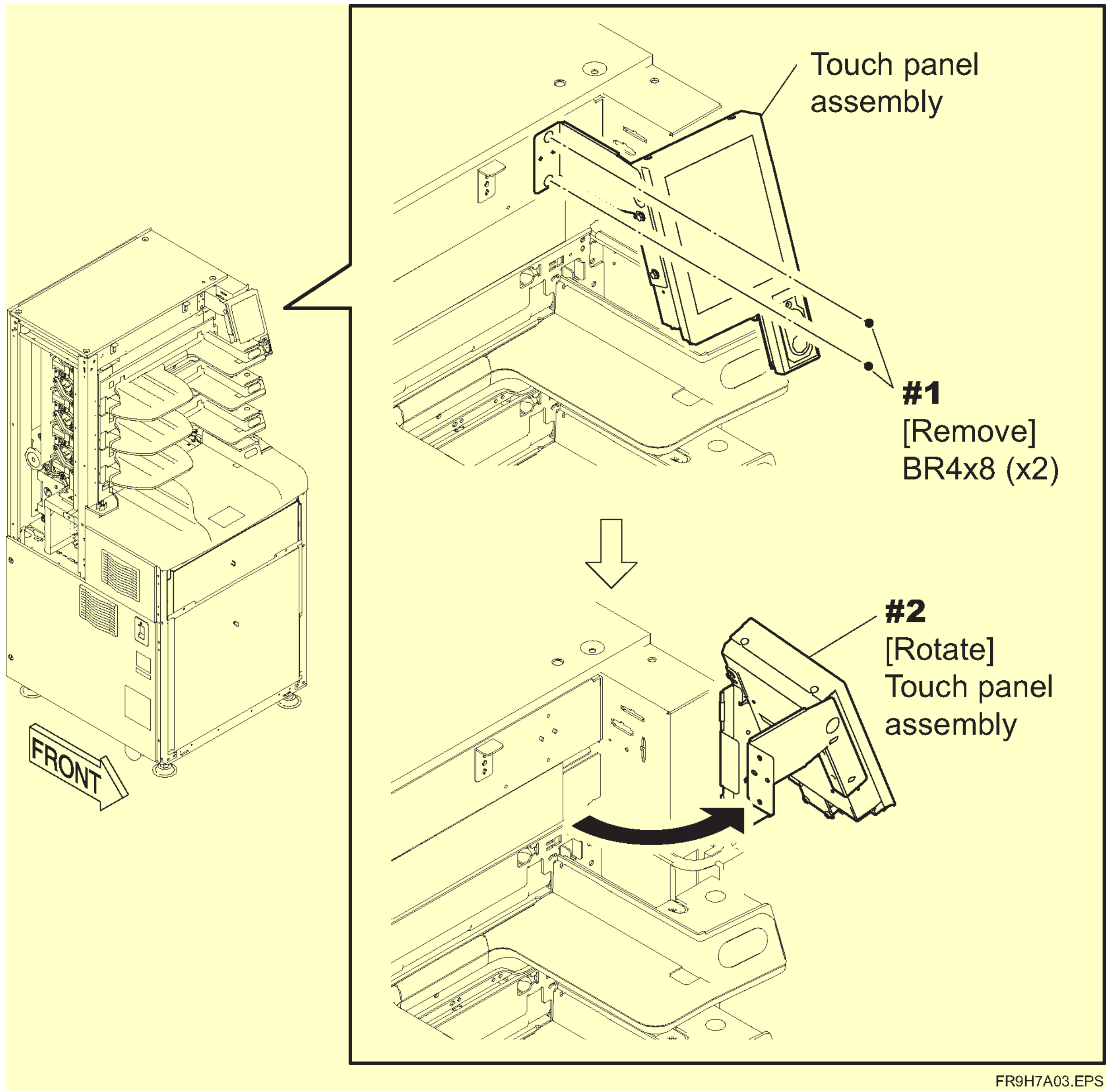
  When installing the shelf cover (for the fourth shelf), avoid the cable and connector beforehand so as not to pinch them.

◆ ***NOTE*** ◆

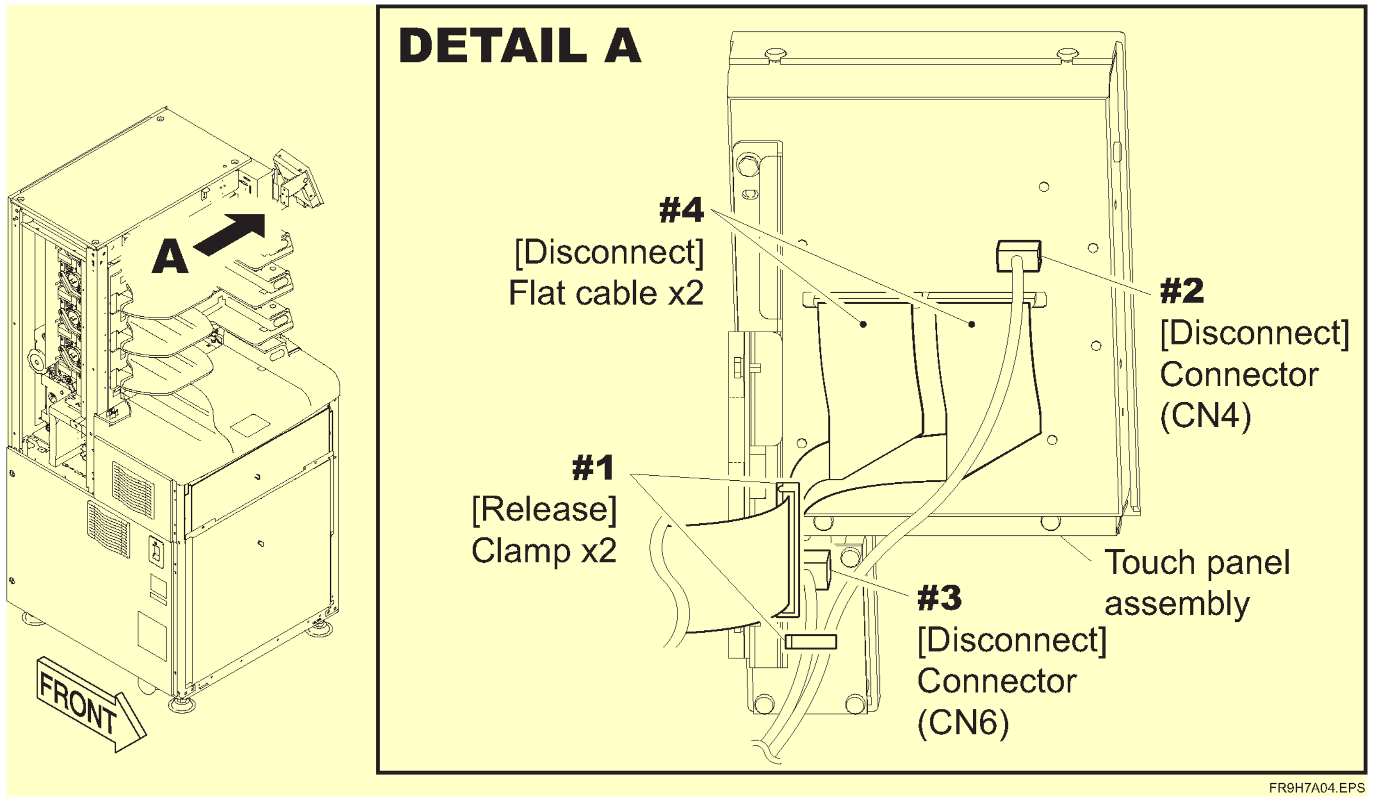
In case of machine #50001 or later, removal procedure of touch panel assembly differs in step 3-5.
For the detailed procedure, refer to "Checks, Replacement and Adjustment of Parts (MC)" in "4.17 Touch Panel Assembly (#50001 or Later)".

☞ *{MC: 4.17_Touch Panel Assembly (#50001 or Later)}*

3. Move the touch panel assembly away.


Touch panel assembly
#1
[Remove]
BR4x8 (x2)
#2
[Rotate]
Touch panel assembly
FRONT
FR9H7A03.EPS

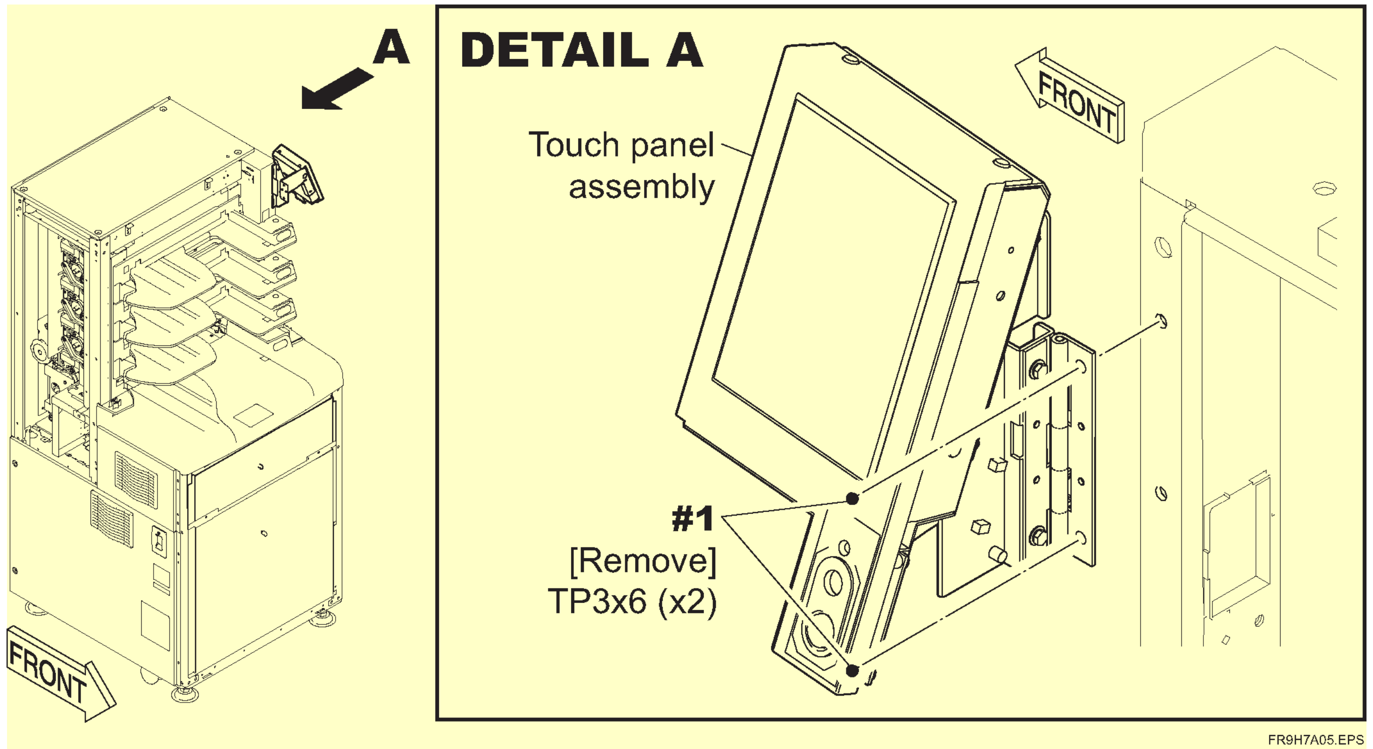
4. Disconnect the cables and connectors.


A
FRONT
DETAIL A
#4
[Disconnect]
Flat cable x2
#2
[Disconnect]
Connector
(CN4)
#1
[Release]
Clamp x2
Touch panel assembly
#3
[Disconnect]
Connector
(CN6)
FR9H7A04.EPS

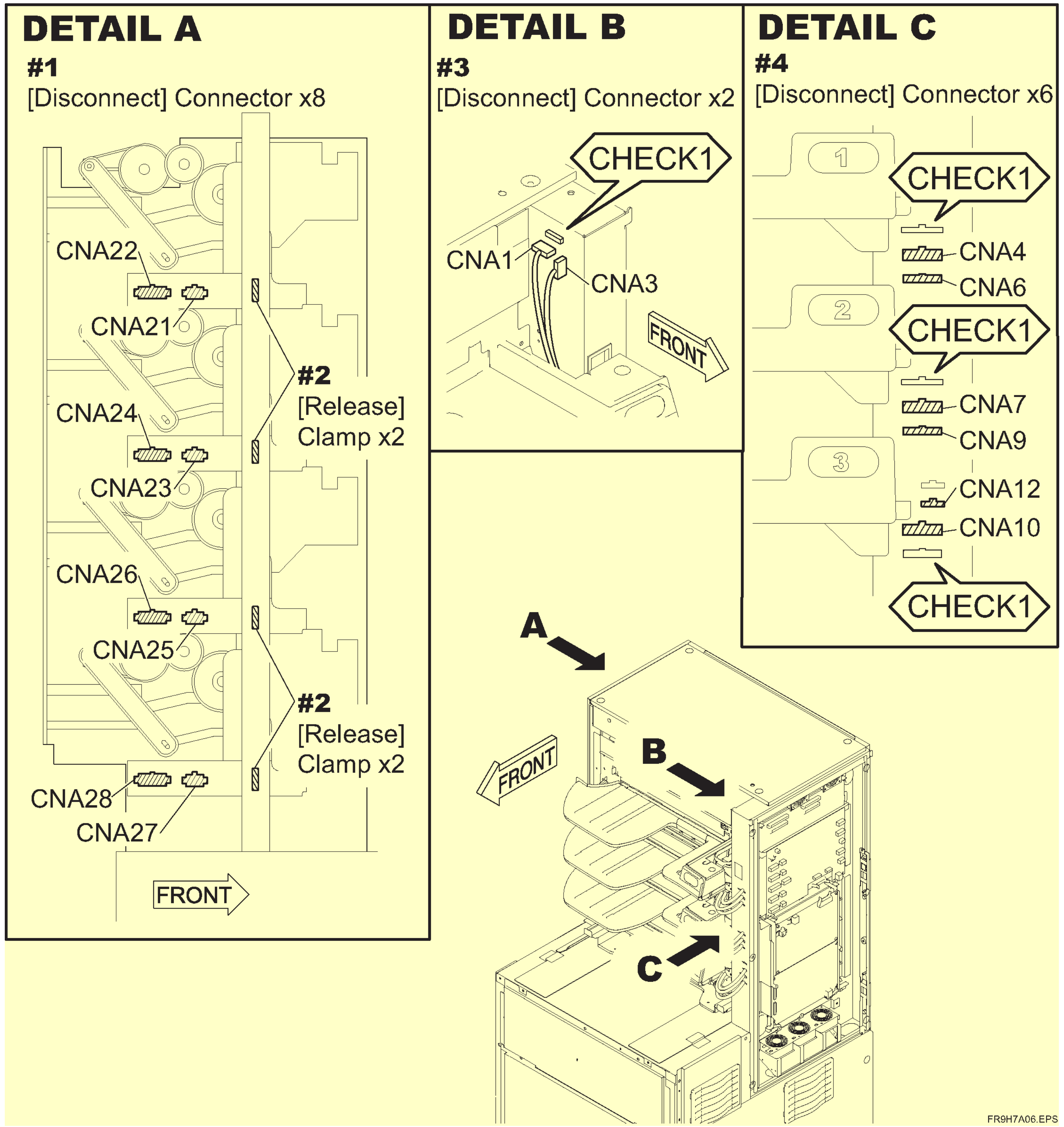
5. Remove the touch panel assembly.

◆ ***NOTE*** ◆

After removing the touch panel assembly, secure the disconnected cables and connectors to the housing with tape or the like to prevent them from becoming entangled.


A
DETAIL A
FRONT
Touch panel assembly
FRONT
#1
[Remove]
TP3x6 (x2)
FR9H7A05.EPS

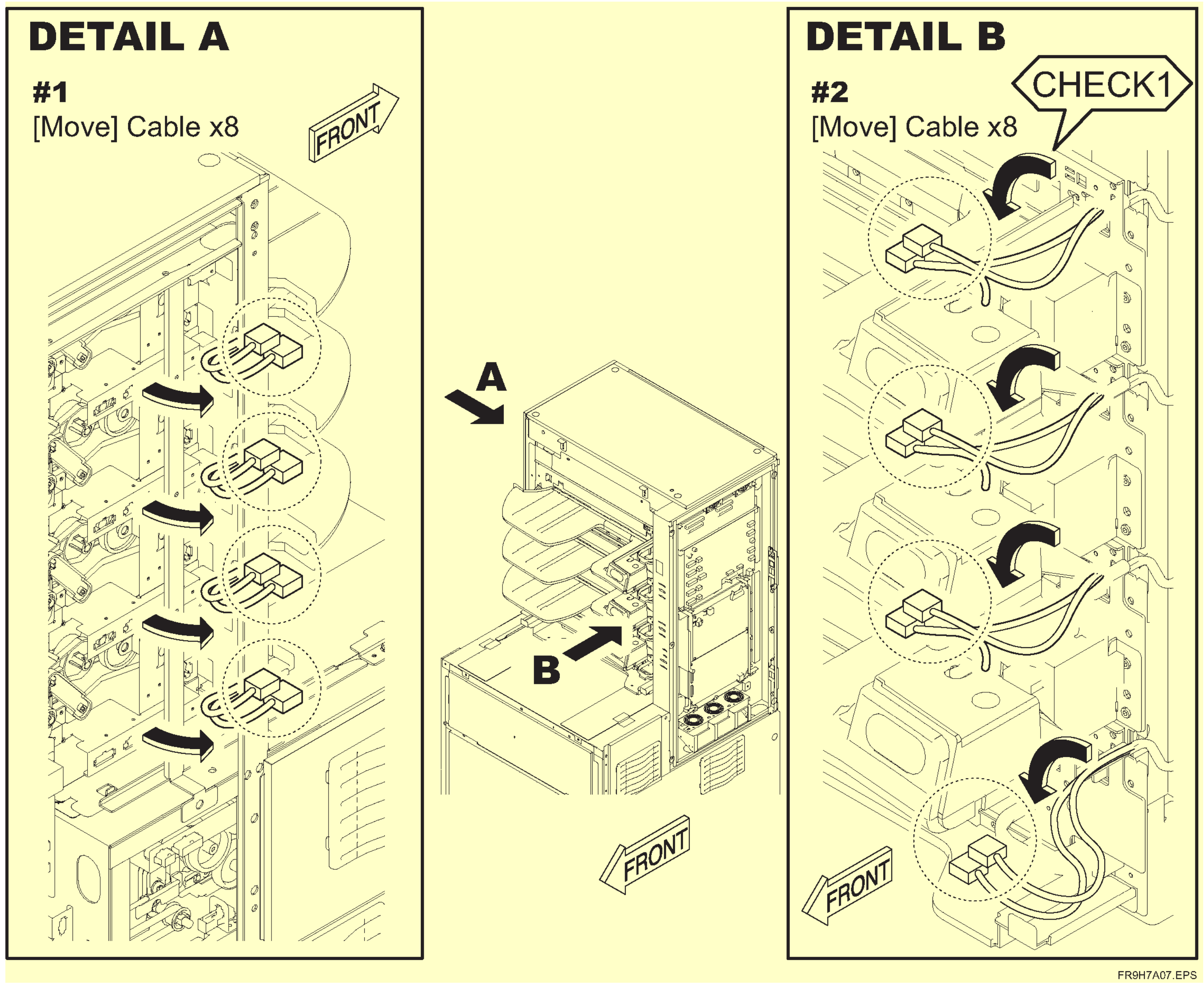
6. Disconnect the connectors.


DETAIL A
#1
[Disconnect] Connector x8
CNA22
CNA21
CNA24
CNA23
CNA26
CNA25
CNA28
CNA27
#2
[Release]
Clamp x2
#2
[Release]
Clamp x2
FRONT
DETAIL B
#3
[Disconnect] Connector x2
CHECK1
CNA1
CNA3
FRONT
DETAIL C
#4
[Disconnect] Connector x6
1
2
3
CHECK1
CNA4
CNA6
CHECK1
CNA7
CNA9
CNA12
CNA10
CHECK1
A
B
C
FRONT
FR9H7A06.EPS

- CHECK 1

  Be sure to connect the connectors of the barcode reader installed.

7. Move the cables away.

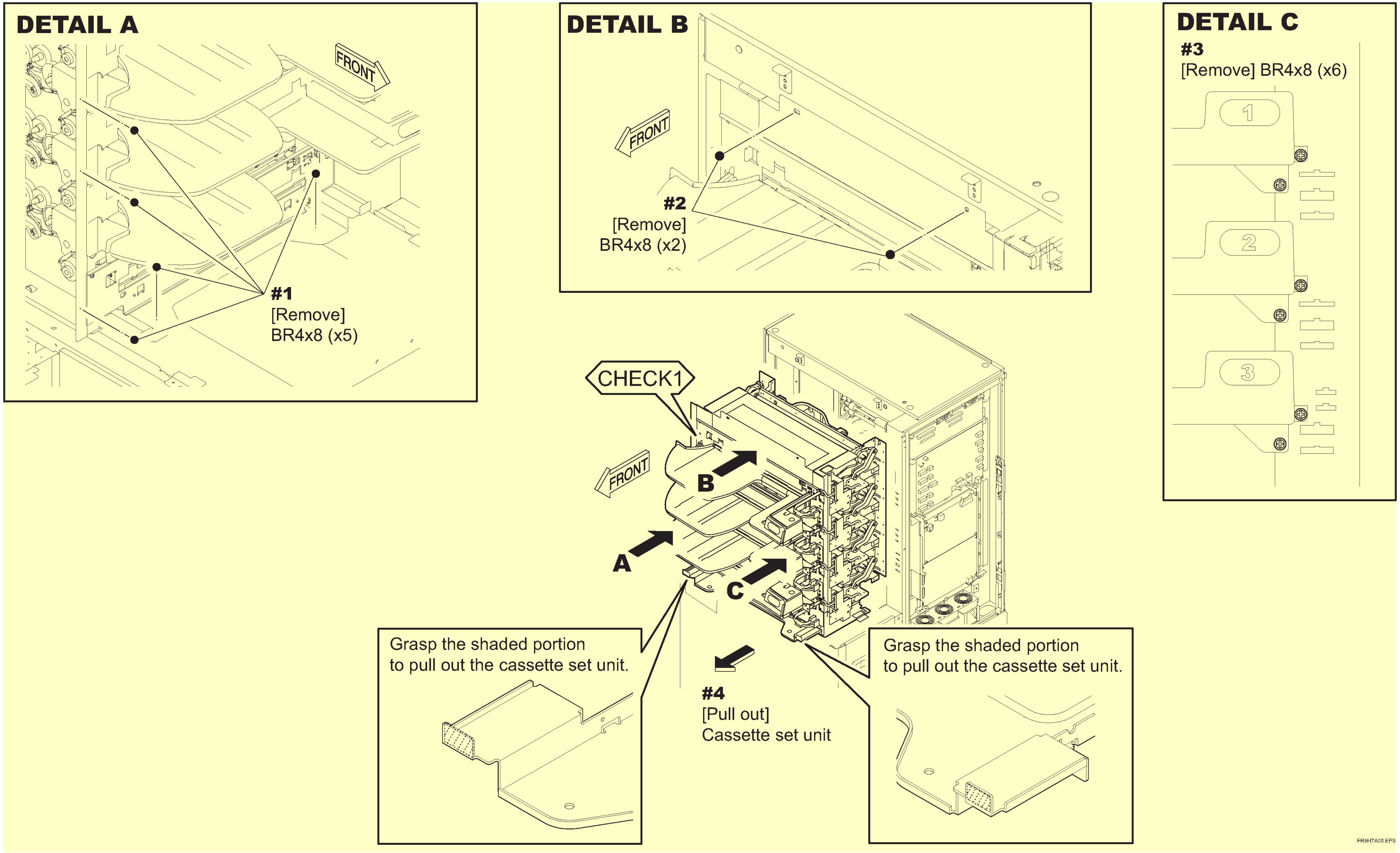

DETAIL A
#1
[Move] Cable x8
FRONT
A
B
FRONT
DETAIL B
#2
[Move] Cable x8
CHECK1
FRONT
FR9H7A07.EPS

- CHECK 1

  Move the cables of the barcode reader installed as well, together with the other cables.

8. **Pull out the cassette set unit.**

☞ {CHECK 1}



DETAIL A
FRONT
DETAIL B
FRONT
DETAIL C
1
2
3
CHECK1
FRONT
A
B
C
FR9H7A08.EPS

#1
[Remove]
BR4x8 (x5)

#2
[Remove]
BR4x8 (x2)

#3
[Remove] BR4x8 (x6)

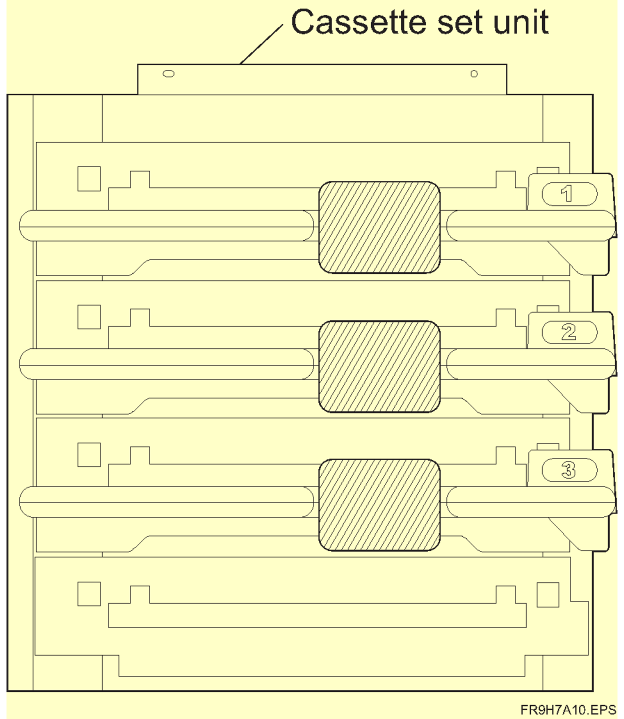
#4
[Pull out]
Cassette set unit

Grasp the shaded portion
to pull out the cassette set unit.

Grasp the shaded portion
to pull out the cassette set unit.

- CHECK 1

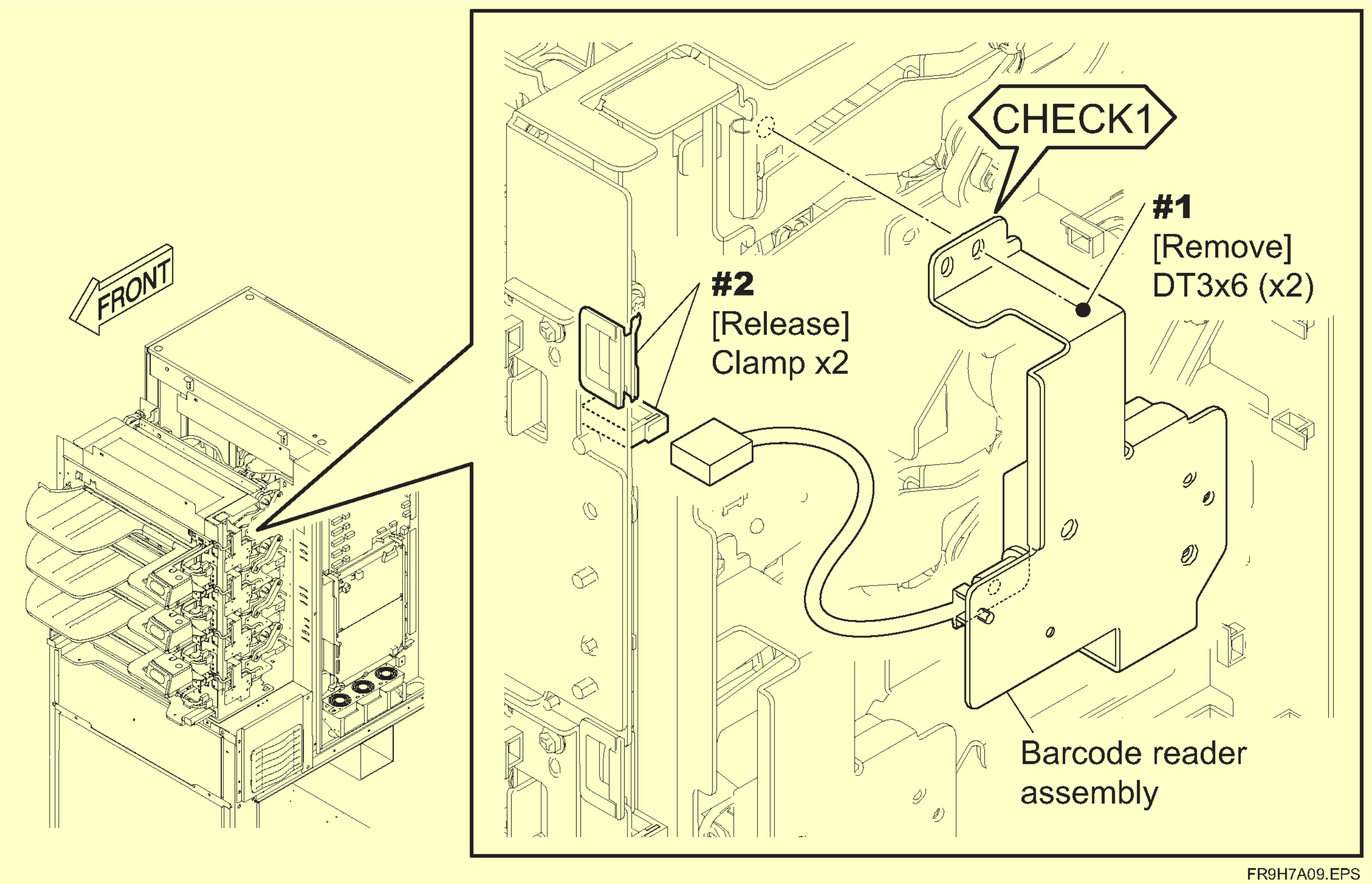
To push the cassette set unit into the housing, get hold of the portions indicated in the illustration below. If other areas are grasped, portions of the cassette set unit may be damaged.


Cassette set unit
1
2
3
FR9H7A10.EPS

9. Install the barcode reader assemblies (for the first, second, third, and fourth shelves).

◆ NOTE ◆

The Installation procedures for the barcode reader assemblies for the first, second, third, and fourth shelves are all identical.


FRONT
CHECK1
#1
[Remove]
DT3x6 (x2)
#2
[Release]
Clamp x2
Barcode reader assembly
FR9H7A09.EPS

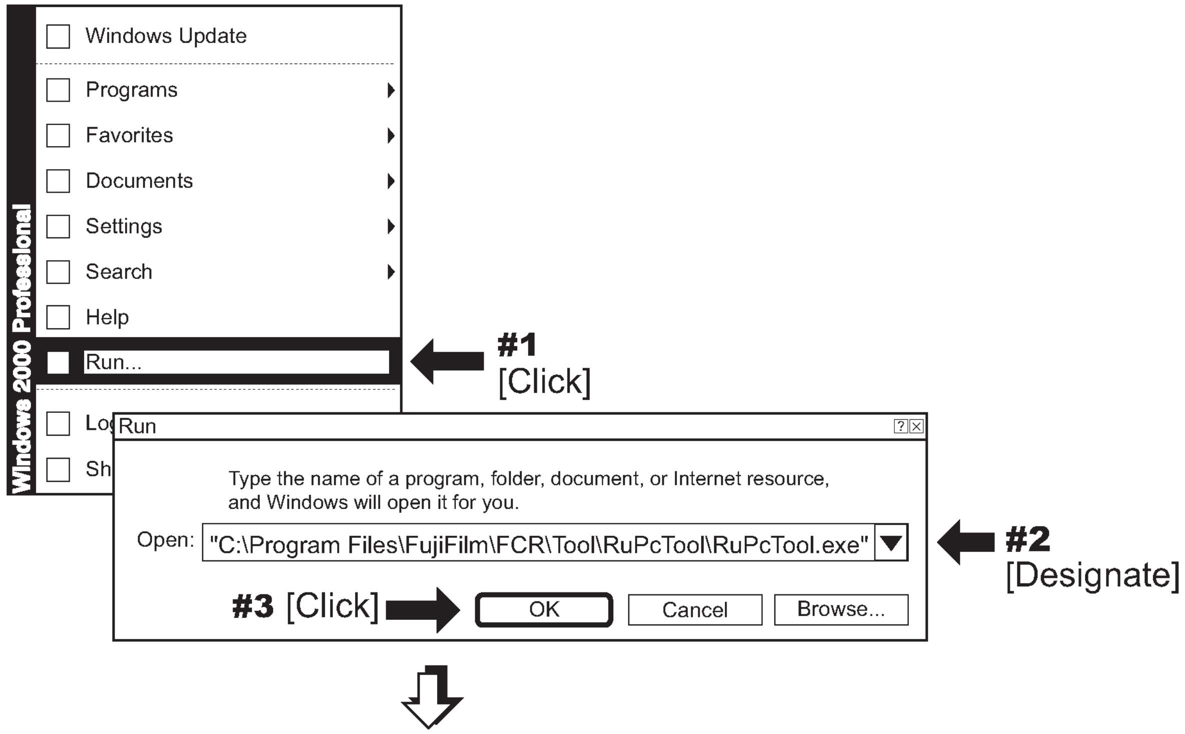
- CHECK 1

Make sure that the barcode reader assembly does not pinch its surrounding cables.

10. Reinstall the removed parts in reverse order of removal.

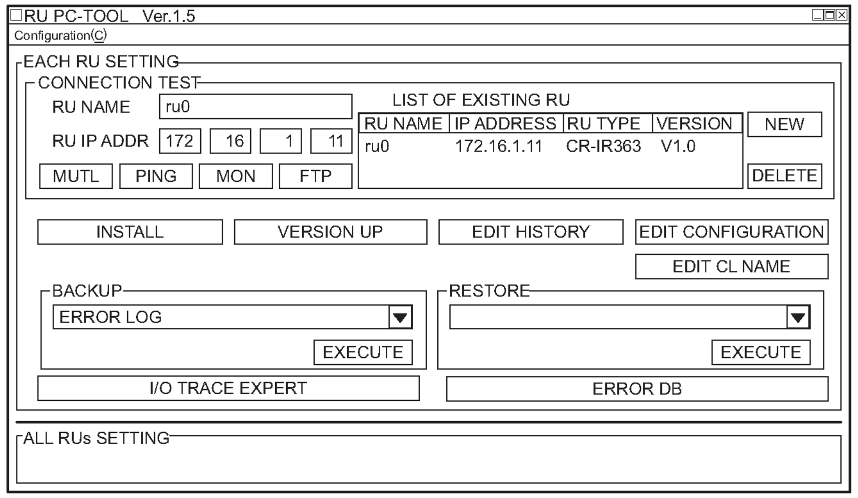
2. Setting the Barcode Reader

1. **Select [Run...] from the Start menu of Windows. When the dialog opens, type ["C:\Program Files\FujiFilm\FCR\TOOL\RuPcTool\RuPcTool.exe"] and click on the [OK] button.**


Windows 2000 Professional
Windows Update
Programs
Favorites
Documents
Settings
Search
Help
Run...
Lo
Sh
#1
[Click]
Run
OK
Cancel
Browse...
#2
[Designate]
#3 [Click]

Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open: "C:\Program Files\FujiFilm\FCR\Tool\RuPcTool\RuPcTool.exe"


RU PC-TOOL Ver.1.5
Configuration(C)
EACH RU SETTING
CONNECTION TEST
MUTL
PING
MON
FTP
NEW
DELETE
INSTALL
VERSION UP
EDIT HISTORY
EDIT CONFIGURATION
EDIT CL NAME
BACKUP
RESTORE
EXECUTE
EXECUTE
I/O TRACE EXPERT
ERROR DB
ALL RUs SETTING

RU NAME: ru0

RU IP ADDR: 172 16 1 11

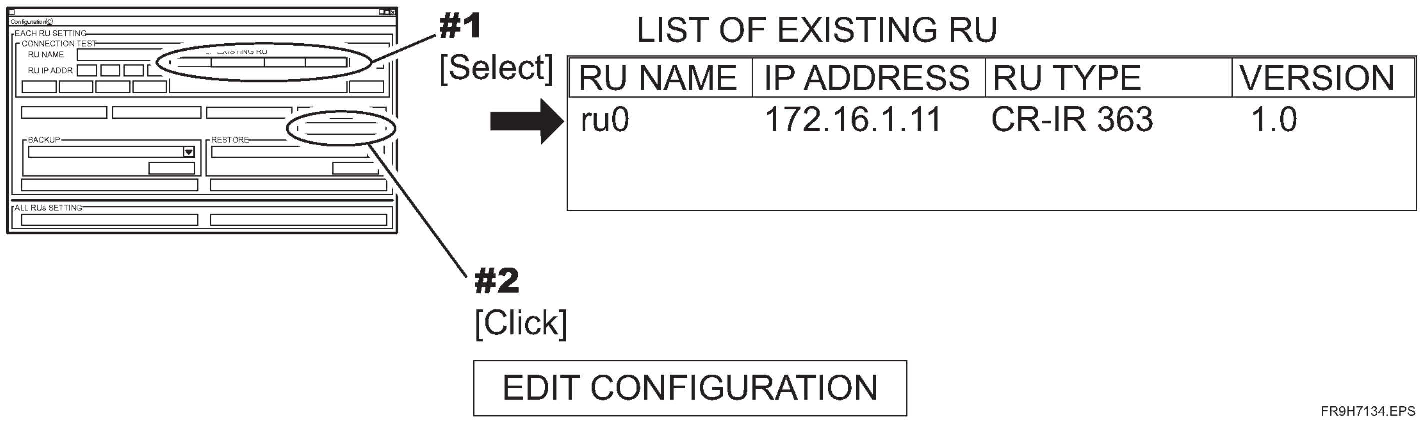
LIST OF EXISTING RU

RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.11	CR-IR363	V1.0

BACKUP: ERROR LOG

FR9H7096.EPS

2. **From "LIST OF EXISTING RU", select a RU for its setting, and click on "EDIT CONFIGURATION".**

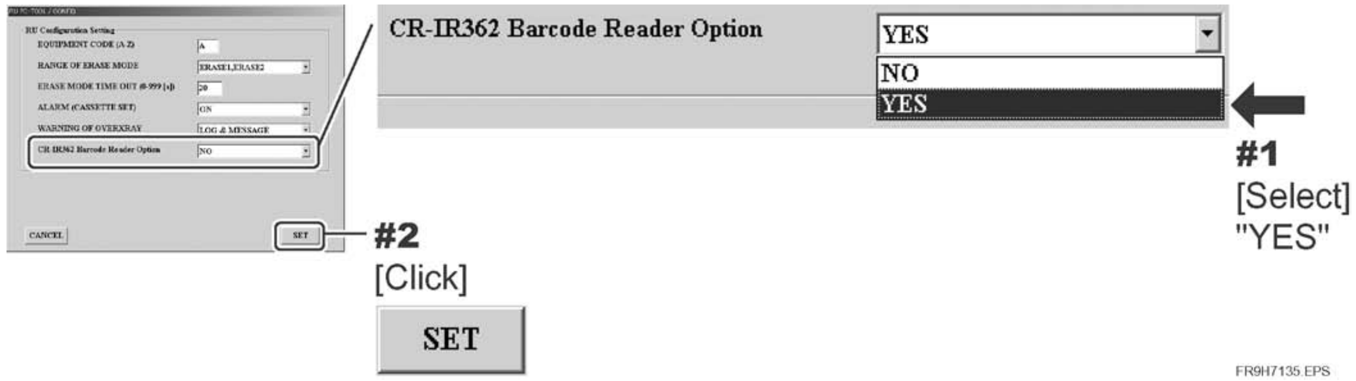

#1
[Select]
#2
[Click]
EDIT CONFIGURATION

LIST OF EXISTING RU

RU NAME	IP ADDRESS	RU TYPE	VERSION
ru0	172.16.1.11	CR-IR 363	1.0

FR9H7134.EPS

3. **Select "YES" from "CR-IR362 Barcode Reader Option", and click on "SET".**


RU PC-TOOL / CONFIG
RU Configuration Setting
CANCEL
SET
#2
[Click]
SET
NO
YES
#1
[Select]
"YES"

EQUIPMENT CODE (A-Z): A

RANGE OF ERASE MODE: ERASE1,ERASE2

ERASE MODE TIME OUT (0-999 [s]): 20

ALARM (CASSETTE SET): ON

WARNING OF OVERXRAY: LOG & MESSAGE

CR-IR362 Barcode Reader Option: NO

CR-IR362 Barcode Reader Option: YES

FR9H7135.EPS

4. **Close the RU PC-TOOL.**

Appendix 5. Changes in the Packaging Specifications (#20001 or Later)

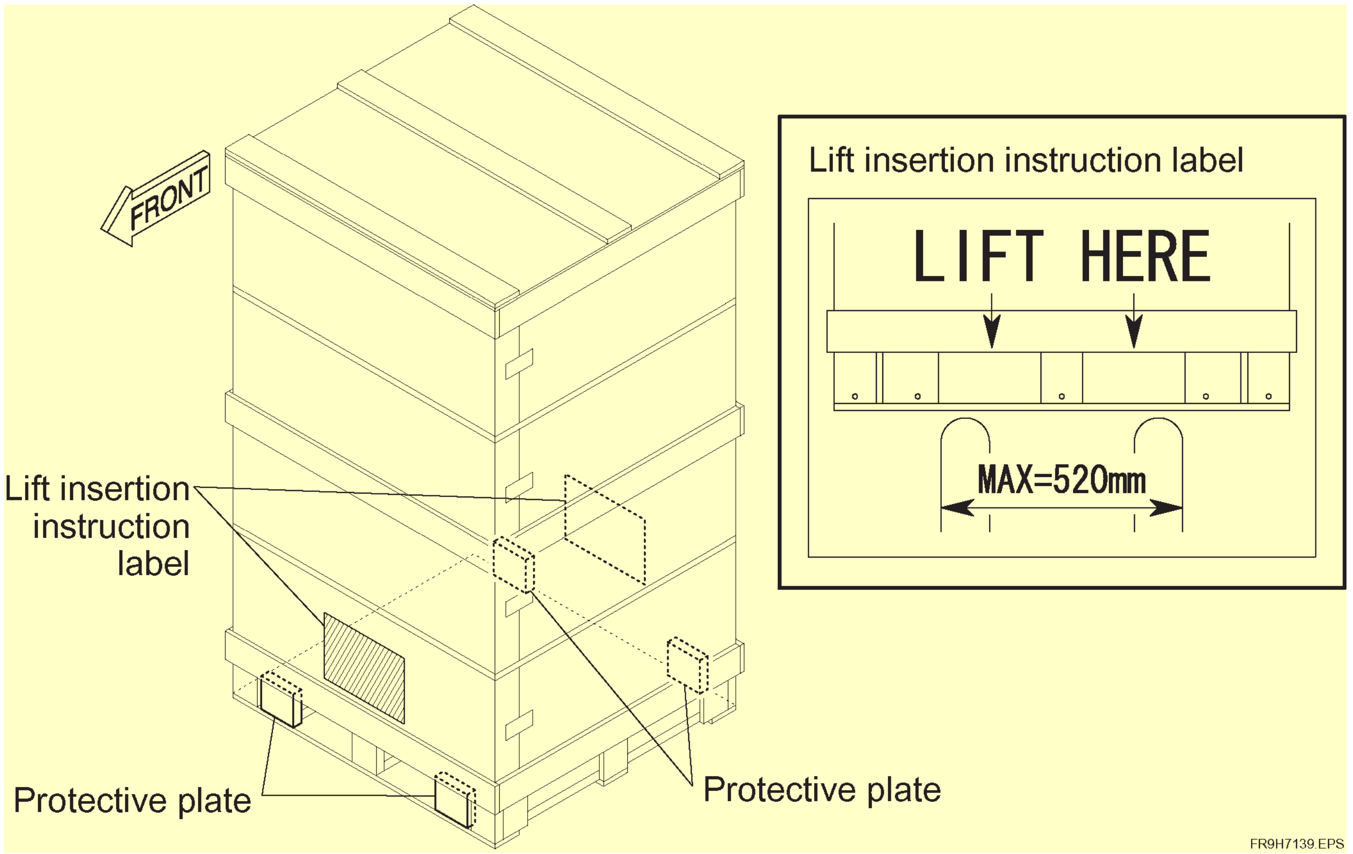
The specifications of the crate have changed for machines of #20690 or later.

The changes are as follows:

1. The protective plates and the lift insertion instruction labels are added to the front and rear faces on the lower part of the crate.
2. The PP band which retains wooden material of the carrier pallet with the shock absorber is changed to a cable member and the retaining location is changed.
3. Wooden materials are added to four corners inside the crate.

1. Addition of the Shock Absorber and Label

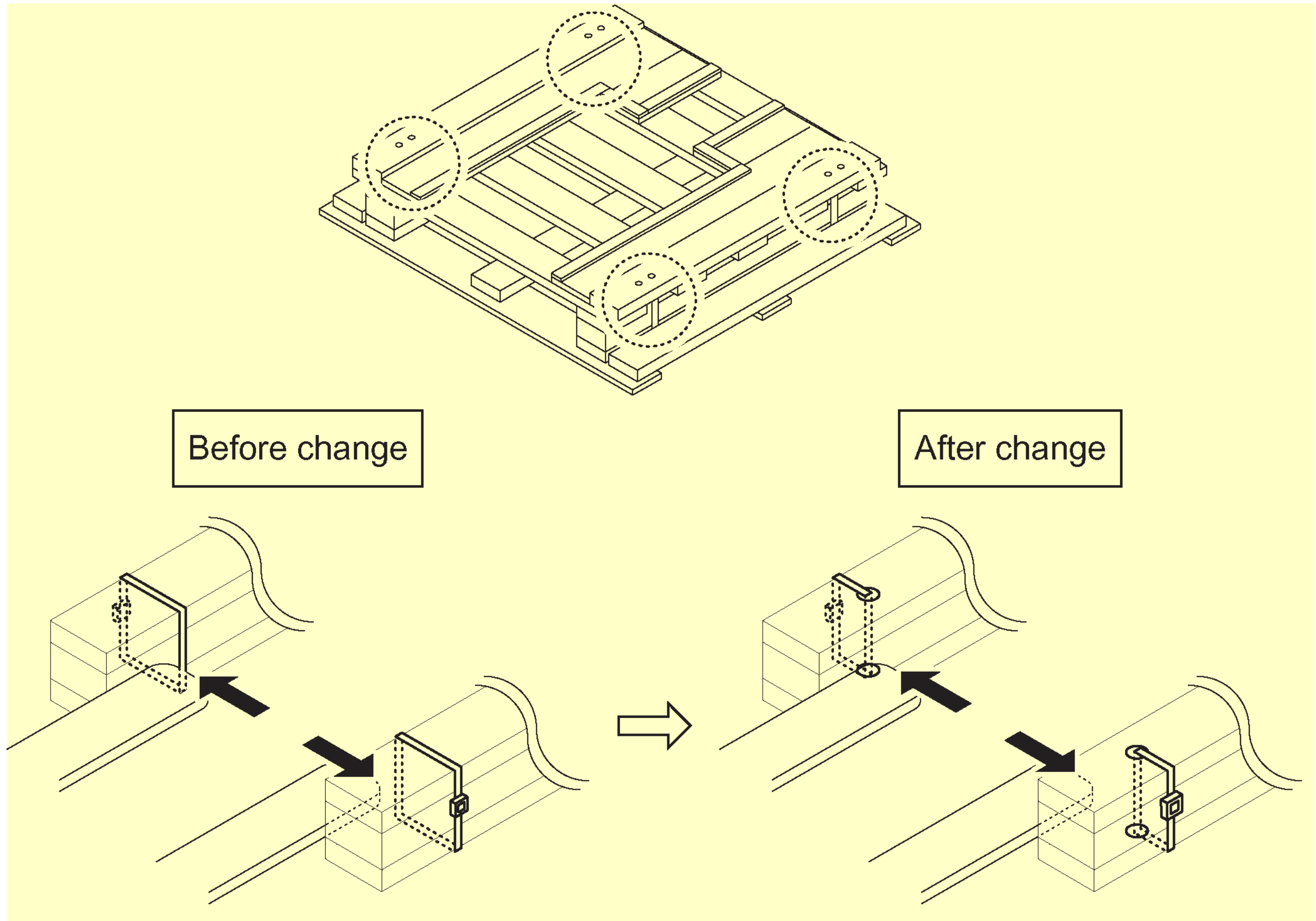
The protective plates and the lift insertion instruction labels are added to the front and rear faces on the lower part of the crate, in order to prevent the carrier pallet from getting damaged when the lift is to be inserted.
The locations where the protective plates and the lift insertion instruction labels are added are as shown below.



2. Changes in Retaining Member and Retaining Location

The PP band is changed to a cable member and the retaining location is changed, so as to prevent the PP band retaining the wooden material with the shock absorber from being cut when the lift is inserted into the carrier pallet.

Before change: The PP band retains around the wooden material and the shock absorber.
After change: Holes are bored on the wooden material and the shock absorber, and the sides which are not to be in contact with the lift are retained by the cable member.

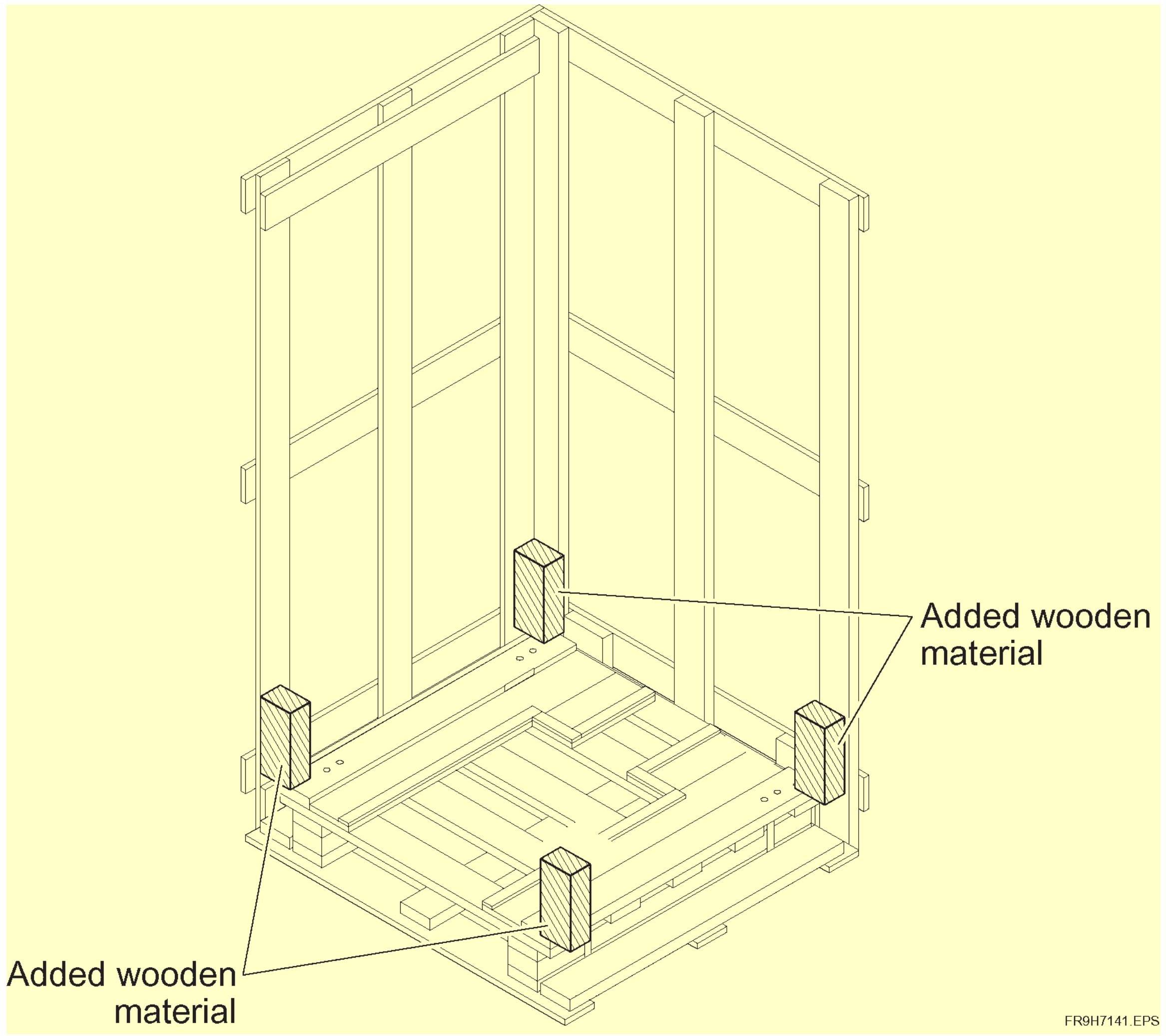


The tip of the lift comes into contact with the PP band, causing the band to be cut.

Since no cable member is present on the side into which the lift is to be inserted, the cable member is not cut.

3. Addition of Members into the Crate

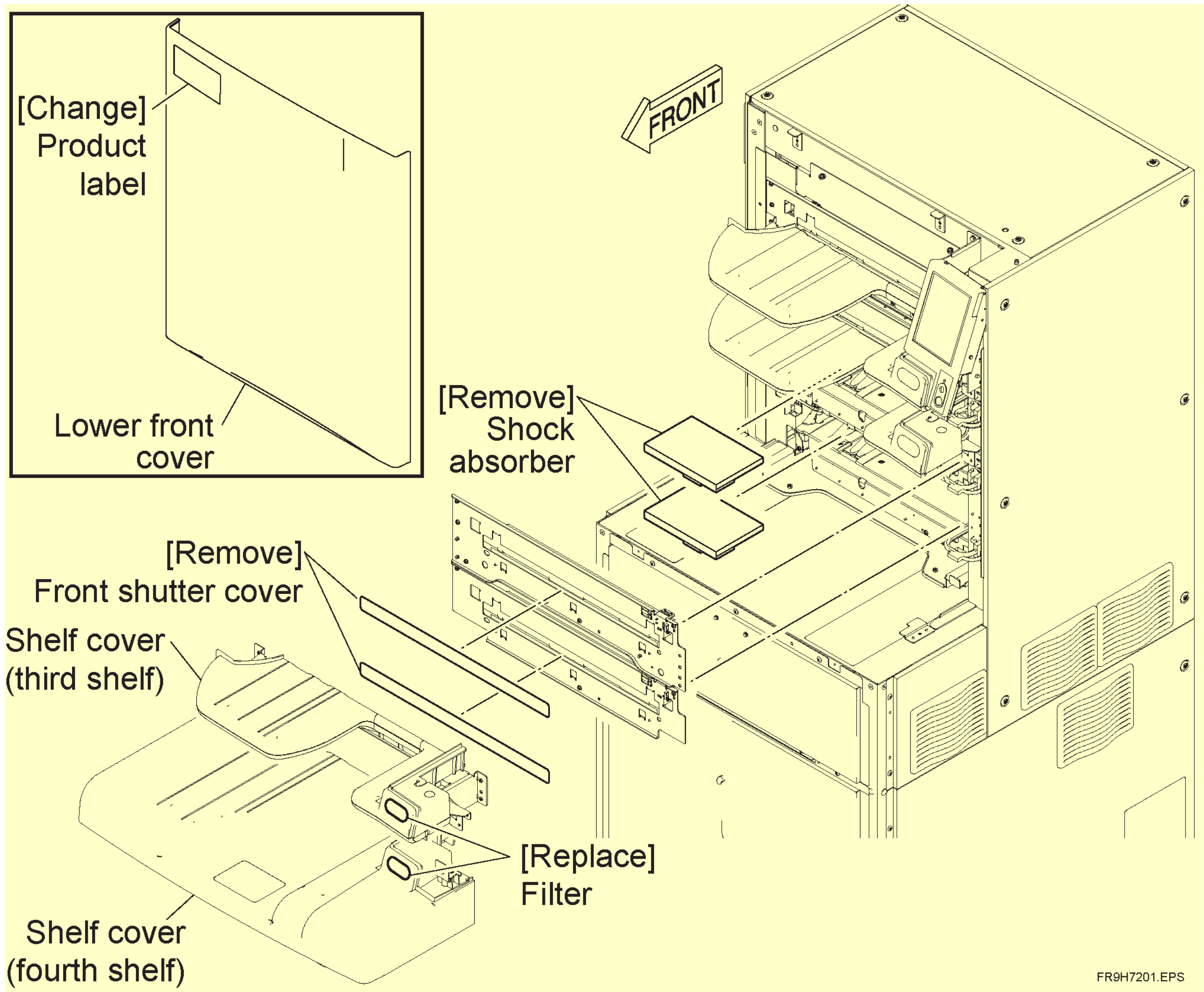
Wooden materials are added to the four corners inside the crate, so as to prevent the outer crate from separating from the carrier pallet when the machine is lifted together with the crate by the lift. The locations where the wooden materials are added are as shown below.


Added wooden material
Added wooden material
FR9H7141.EPS

Appendix 6. Procedures for Upgrading the XG2000 to the XG5000

The procedures are used in upgrading the XG2000 to the XG5000. The following operations are required:

- Removing the front shutter covers which close the cassette inserting entrances on the third and fourth shelves.
- Replacing the filters on the shelf covers (on the third and fourth shelves).
- Removing the shock absorbers
- Replacing the product label
- Updating the RU software version


[Change]
Product label
Lower front cover
FRONT
[Remove]
Shock absorber
[Remove]
Front shutter cover
Shelf cover (third shelf)
[Replace]
Filter
Shelf cover (fourth shelf)
FR9H7201.EPS

1. Removal and Replacement of Components

■ Removal and Replacement Procedures

1. Remove the covers.

- Upper front cover
- Lower front cover

☞ {MC:3.1_Covers}

2. Remove the shelf cover (on the fourth shelf) and the front shutter cover.

☞ {MC:24.2_Front Shutter Cover (Fourth Shelf)}

3. Remove the shutter assembly from the fourth shelf.

☞ {MC:5.5_Shutter Assembly (for the Fourth Shelf)}

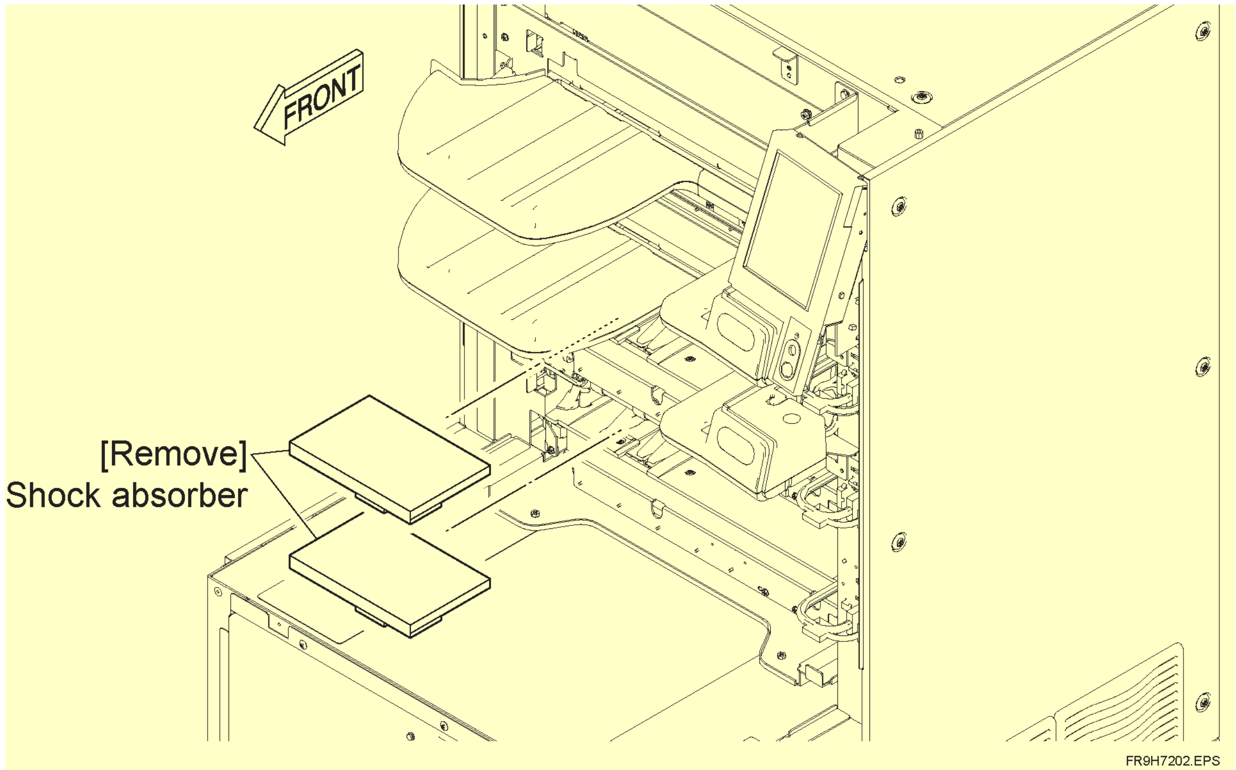
4. Remove the shutter assembly from the third shelf.

☞ {MC:5.4_Shutter Assemblies (for the Second and Third Shelves)}

5. Remove the shelf cover (on the third shelf) and the front shutter cover (on the third shelf).

☞ {MC:24.1_Front Shutter Cover (Third Shelf)}

6. Remove the shock absorbers.


FRONT
[Remove]
Shock absorber
FR9H7202.EPS

7. **Replace the filter on the shelf cover (on the third shelf) with the filter indicating the shelf No.**

   ☞ {MC:5.8_LEDs (for the First, Second, and Third Shelves)}

8. **Reverse the procedures for filter replacement to assemble the shutter assembly on the third shelf.**

   ☞ {MC:5.8_LEDs (for the First, Second, and Third Shelves)}

9. **Replace the filter on the shelf cover (on the fourth shelf) with the filter indicating the shelf No.**

   ☞ {MC:5.9_LED (for the Fourth Shelf)}

10. **Reinstall the shutter assembly on the third shelf.**

    ☞ {MC:5.4_Shutter Assemblies (for the Second and Third Shelves)}

11. **Reinstall the shutter assembly on the fourth shelf.**

    ☞ {MC:5.5_Shutter Assembly (for the Fourth Shelf)}

12. **Reinstall the shelf cover.**

    ☞ {MC:3.3_Shelf Cover (for the Fourth Shelf)}

13. **Replace the product label applied on the lower front cover with the XG5000 label.**

14. **Reinstall the covers.**
    - Upper front cover
    - Lower front cover

    ☞ {MC:3.1_Covers}

2. Updating the RU Software Version

Update the RU software version, and install the RU software for the XG5000. Refer to the Checks, Replacement and Adjustment of Parts (MC), "15. Updating Software Versions" for the updating procedures.

☞ **{MC:15._Updating Software Versions}**

◆ ***NOTE*** ◆

When the image/conveyance is to be checked after updating the RU software version, insert the cassettes into the third and fourth shelves, and check to make sure that the machine normally works.

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Control Sheet

Issue date	Revision number	Reason	Pages affected
02.20.2004	03	New release (FM4181)	All pages
11.15.2004	04	Corrections (FM4425)	1
02.19.2007	07	Change of document number (FM5097)	All pages

CR-IR 362 Service Manual

Performance Check (PC)

CR-IR 362 Performance Check List

The purpose of this performance check list is used at the time of CR-IR 362 installation to record the steps performed, measured values, and settings, which are based on the instructions set forth in the Service Manual. This checklist is not supposed to replace the installation steps set forth in the CR-IR 362 Service Manual but is to be followed concurrently.

Verify the proper equipment operations at installation and after servicing by checking the system connection and output image quality (section 9), and then pass the equipment over to the customer.

Installation Information

Serial Number: ____________________ Software Ver.: ____________________
Site Name: ____________________ Installed by: ____________________
Site Number: ____________________ Signature ____________________
Room Name: ____________________
Installation Date/Servicing Date: ______________

Checklist

☐ 3. Preparation for Installation
- ☐ 3.5 Checking the Items Supplied

☐ 4. Installation Procedures
- ☐ 4.1 Removing Tapes from the Machine
- ☐ 4.2 Removing the Light Protect Plates
- ☐ 4.3 Repositioning the Retaining Members
- ☐ 4.4 Installing the Cover

☐ 5. Connecting the Cables
- ☐ 5.1 Connecting the Power Cable and Checking Resistance Value

  * Record resistance value measured:
  Resistance between L and N: __________Ω
  Resistance between L and E: __________Ω
  Resistance between N and E: __________Ω
- ☐ 5.2 Connecting the Interface Cable

☐ 6. Final Placement
- ☐ 6.1 Securing the Cable
- ☐ 6.2 Securing the Machine

☐ 7. CL Installation Procedures

☐ 8. Installing the RU Software
- ☐ 8.1 Setting the IP Address of the RU
- ☐ 8.2 Setting the CL and Checking Connection

  FTP Server ☐ OK ☐ NG
  Default Gateway ☐ OK ☐ NG
- ☐ 8.3 Installing Setup PC-TOOL
- ☐ 8.4 RU/CL Software Setup Checkpoints
  - ☐ 8.4.1 Checking the CL Software Version
  - ☐ 8.4.2 Checking Configuration of the CL - 1
  - ☐ 8.4.3 Checking Configuration of the CL - 2
  - ☐ 8.4.4 Checking Configuration of the CL - 3
  - ☐ 8.4.5 Checking Configuration of the CL - 4
  - ☐ 8.4.6 Checking FTP of the CL - 1
  - ☐ 8.4.7 Checking FTP of the CL - 2
  - ☐ 8.4.8 Checking Setup of the RU
- ☐ 8.5 Installing RU Software

  Software Ver.: _____

☐ 9. Image/Conveyance Checks
- ☐ 9.1 Check Before Procedures
- ☐ 9.2 Image/Conveyance Checks

  ST: X-ray dose:______mR S value:_____ ☐ OK ☐ NG
  Image irregularities ☐ OK ☐ NG
  Shading check ☐ OK ☐ NG
  Image format check ☐ OK ☐ NG

☐ 10. Powering OFF the CL/RU

☐ 11. Cleaning the CL/RU

Summary Test ☐OK ☐NG

☐ Film output must be stored as the record of performance check.

Test equipment:_______, Model:_______, S/N:_______, Calibration Due:_______
Test equipment:_______, Model:_______, S/N_______, Calibration Due:_______
Test equipment:_______, Model:_______, S/N:_______, Calibration Due:_______
Test equipment:_______, Model:_______, S/N:_______, Calibration Due:_______

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